

Michigan's Resource Conservation and Recovery Act

Accomplishments Report Fiscal Year 2016

October 1, 2015 – September 30, 2016

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Finalized December 1, 2016



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Note: The tables included throughout this Report have been pulled directly from the MDEQ’s Waste Data System (WDS) database and the information contained therein may include shortened descriptions and/or acronyms. If questions regarding the table contents arise, the reader is encouraged to contact the MDEQ for clarification.

INTRODUCTION

This report provides a year-end summary of the fiscal year (FY) 2016 work accomplishments of the Resource Conservation and Recovery Act of 1976 (RCRA) Work Plan (Work Plan), by the Michigan Department of Environmental Quality (MDEQ), Office of Waste Management and Radiological Protection (OWMRP), as requested by the U.S. Environmental Protection Agency (U.S. EPA), Region 5. These accomplishments fulfill the MDEQ's obligation in its role of administering the national Solid Waste Disposal Act in Michigan, as amended by the RCRA, and as amended by the Hazardous and Solid Waste Amendments of 1984.

JANUARY 5, 2016, FLINT, MICHIGAN – DECLARATION OF STATE OF EMERGENCY

On January 5, 2016, Michigan's Governor Richard Snyder declared a State of Emergency for Genesee County and the city of Flint due to the ongoing health and safety issues caused by lead in the city of Flint's drinking water. As part of that declaration, Michigan activated their State Emergency Operations Center and the Michigan Emergency Management and Homeland Security Division of the Department of State Police was directed to coordinate efforts to respond to the emergency. As part of this process, the MDEQ was requested to recruit staff from all areas within the Department to help with bottled water and filter distribution to affected homes, to develop sampling plans and to assist with samplings, to provide training on sampling protocol, to distribute sampling equipment and to pick up samples following their collection, to develop a data management system capable of collecting and managing data and producing graphical displays, and to assist with the identification of lead service lines and lead fixtures in homes. Because employees in the MDEQ's Hazardous Waste Program (HWP) are highly specialized to perform work in these areas, 11 staff from the Hazardous Waste Section (HWS) and several HWP support staff from management and the Districts have been designated to help with these efforts. The following is a summary of the HWP staff work effort that has occurred since the emergency was declared.

In FY 2016, the HWS spent approximately 1,950 hours conducting the following work activities in response to the city of Flint Emergency Declaration:

- 1,020 hours spent serving as a subject matter expert for Geographic Information Systems (GIS), database management, Environmental Systems Research Institute (ESRI) data collector apps, managing and generating data, and display maps.
- 470 hours spent participating in work involving the interpretive guide for web results/video development, sample prep work, targeted school drinking water work, delivery of sampling equipment and sample pick up at sentinel sampling sites, and assistance to help identify locations of lead water supply lines in area homes.
- 210 hours spent serving as a subject matter expert for preparing Toxic Steering Group (TSG) subcommittee recommendations and assistance for public information materials and to assist with water testing data reporting.
- 200 hours spent scanning MDEQ documents for purposes of the Flint Drinking Water lawsuits.
- 10 hours spent conducting training, preparing for sampling events, providing consultations and research on geophysical methods and applications, and providing administrative coordination for the HWP staff.

Additionally, HWP District and other support staff provided more than 450 hours on various activities (assisting recycling efforts, scanning files, staffing assistance for the Flint Field Office, picking up home 'first run' water samples, assessing indoor piping, etc.) in response to the city of Flint Emergency Declaration.

PROGRAM ELEMENTS

In FY 2016, the MDEQ used seven elements in an effective state program to manage hazardous waste through a delegation of RCRA authorities.

The Work Plan elements were as follows:

- State Authorization
- Compliance and Enforcement
- Environmental Justice
- Administrative Controls (operating licenses, postclosure (PC) operating licenses, clean-closure, PC plans, and orders/legally enforceable agreements)
- Corrective Action
- Financial Capability
- Management and Reporting

The year-end accomplishments are discussed in the applicable sections below.

State Authorization

U.S. EPA FY 2014 – 2018 Strategic Plan, Goal 3: Cleaning Up Communities and Advancing Sustainable Development

Objective 3.2: *Preserve Land.* Conserve resources and prevent land contamination by reducing waste generation and toxicity, promoting proper management of waste and petroleum products, and increasing sustainable materials management.

Objective 3.3: *Restore Land.* Prepare for and respond to accidental or intentional releases of contaminants and clean up and restore polluted sites for reuse.

The MDEQ is working on the 11th amendment to the rules promulgated pursuant to Part 111, Hazardous Waste Management, of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). A courtesy copy of the draft rules package was provided to Ms. Judy Greenberg, U.S. EPA, Region 5, on February 10, 2016. A second draft package was prepared in response to comments received as part of an internal review. The second draft was shared with the HWP Short List, which includes Ms. Greenberg, on May 10, 2016, and copies of the associated RCRA Revision Checklists were provided to Ms. Greenberg that same day. Following the completion of the Short List process, a third draft package was prepared. Notice of the public hearing on this package was provided to the HWP Long List on September 20, 2016, and published in three newspapers on September 29, 2016. Ms. Greenberg was provided with a copy of the fourth draft and checklist updates on September 21, 2016.

Notice of the public hearing on the rules was published in the MDEQ Calendar on October 3, and October 17, 2016, and in the Michigan Register on October 15, 2016. The date of the public hearing was October 20, 2016. The public comment period closed on November 4, 2016. It is anticipated that the rules will be effective in February 2017.

The state's Report of Authorized State Program Revisions (RASPR) was submitted to the U.S. EPA, Region 5 on January 20, 2016.

Environmental Justice

U.S. EPA FY 2014 – 2018 Strategic Plan, Goal 3: Cleaning Up Communities and Advancing Sustainable Development

Objective 3.1: *Promote Sustainable and Livable Communities.* Support sustainable, resilient, and livable communities by working with local, state, tribal, and federal partners to promote smart growth, emergency preparedness and recovery planning, redevelopment and reuse of contaminated and formerly contaminated sites, and the equitable distribution of environmental benefits.

Training: The MDEQ continues to encourage staff to become trained in Environmental Justice (EJ) as new state and federal guidance is developed so that EJ principles are incorporated into all aspects of the RCRA decision-making processes. During the first half of FY 2016, the HWS participated in some National Environmental Justice Advisory Council Public Teleconferences; U.S. EPA EJ Community Outreach Calls; U.S. EPA, GovLoop, and independent entities EJ Webinars, and Region5/State Monthly EJ Calls. Additionally, the HWS continues to review external EJ policies and procedures for applicability to Michigan.

Examples of Implementation: In general, the RCRA HWP has expanded its public participation process due to EJ principles. For most projects, public meetings are posted on the Internet via YouTube to be accessed by anyone at any time. Licensing and contact information is also routinely posted on city Web sites, which is in addition to what our administrative rules require. We have also implemented mass-mailings to alert the public of licensing and corrective action at facilities in EJ areas. This has proven to be a very effective method of increasing participation in the public comment process.

Licensing: To ensure that the HWS follows consistent procedures to process operating license renewal and new license/expansion applications, each project manager uses a master checklist for guidance and tracking. An EJ item is in the checklist to ensure that EJ is considered and incorporated into operating license decisions to the maximum extent possible. This checklist item provides a protocol for evaluating if an area should be considered an EJ area using EJSCREEN. The project manager uses the protocol to analyze a site in EJSCREEN, evaluate the EJSCREEN outputs, make some common sense decisions about appropriate EJ actions for the facility (i.e., type of enhanced outreach), and create a memo for the file.

Translation Project: Since Michigan communities may have locations that are primarily non-English speaking, it is not reasonable to assume that traditional public outreach will be sufficient in these areas. To address this concern, the HWS implemented the MDEQ/University of Michigan (UM) volunteer translation service that is now available to state agencies free of charge. As this partnership evolves, the MDEQ will continue to coordinate with the UM to implement improvements as necessary.

Compliance and Enforcement

FY 2014 – 2018 Strategic Plan, Goal 3: Cleaning Up Communities and Advancing Sustainable Development

Objective 3.2: *Preserve Land.* Conserve resources and prevent land contamination by reducing waste generation and toxicity, promoting proper management of waste and petroleum products, and increasing sustainable materials management.

U.S. EPA FY 2014 – 2018 Strategic Plan, Goal 5: Protecting Human Health and the Environment by Enforcing Laws and Assuring Compliance

Objective 5.1: *Enforce Environmental Laws to Achieve Compliance.* Pursue vigorous civil and criminal enforcement that targets the most serious water, air, and chemical hazards in communities to achieve compliance. Assure strong, consistent, and effective enforcement of federal environmental laws nationwide. Use Next Generation Compliance strategies and tools to improve compliance and reduce pollution.

Compliance Assistance and Compliance Incentives

Hazardous Waste Outreach Events: During FY 2016, the MDEQ provided basic RCRA workshop and webinar training to over 3,000 people. Topics covered included RCRA and other basic environmental waste regulations; hazardous and liquid industrial by-product waste characterization, generator status, accumulation, record keeping, and inspections; universal waste and used oil; statutory changes related to the recycling and disposal of Conditionally Exempt Small Quantity Generator (CESQG) liquids (now called Liquid Industrial By-product (LIB) under Michigan law); hazardous waste and LIB transport, and pharmaceutical environmental waste regulations. The following details each of the events and the number of attendees/viewers:

Date	Event	Topic	Attended	Recorded Views
02/20/2016	West Michigan Air and Waste Management Association Annual Hazardous Waste Workshop in Grand Rapids	Part 121, CESQG, and LIB regulations	121	
03/01/2016	Waste to By-Product Webinar	Part 121, CESQG, and LIB regulations	714	244
04/14/2016	Upper Peninsula Solid Waste Forum in Marquette	Part 121, CESQG, and LIB regulations	89	
04/27/2016	Michigan Pharmacists Association Law Symposium in Lansing	Existing and Proposed Pharmaceutical Waste Regulations	174	
03/25/2016	Retail Environmental Workgroup	Part 121, CESQG, and LIB regulations	15	
05/11/2016	Michigan Association of Community Mental Health Boards Proper Drug Disposal in Lansing	Existing and Proposed Pharmaceutical Waste Regulations	40	
05/27/2016	Retail Environmental Workgroup	Existing and Proposed Pharmaceutical Waste Regulations	15	
04/20/2016	Michigan Safety Conference in Grand Rapids	What to Expect from a DEQ Inspection	45	
06/21/2016 and 06/22/2016	Michigan Environmental Compliance Conference in Lansing	All topics	795	

Date	Event	Topic	Attended	Recorded Views
09/21/2016	Pharmaceutical Waste Webinar	Existing and Proposed Regulations, Minimizing Pharmaceutical Waste	285	25
09/28/2016	Waste 101 Webinar ,	Waste Regulations and Basic Requirements	392	62
TOTAL			2,685	331

Hazardous Waste Publications: During FY 2016, in support of the outreach events, the following RCRA program resources were also created or updated:

- [10 Steps to Managing Pharmaceutical Waste](#) (revised December 2015)
- [Selecting a Transporter or TSDF Guidance Document](#) (revised December 2015)
- [Nonmetallic Mineral Crushing Facilities Guide](#) (revised November 2015)
- [Remedy for Residential Drug Disposal Flyer](#) (revised February 2016)
- [Part 121 Liquid Industrial By-Products \(formerly Liquid Industrial Waste\) Statutory Changes Web page](#) (new April 2016)
- [Part 121 Liquid Industrial By-Products Generator Guidance](#) (revised March 2016)
- [Part 121 Liquid Industrial By-Products FAQ](#) (new April 2016)
- [Generator Tracking Log for Manifests/Shipping Documents](#) (revised March 2016)
- [Example Bill of Lading](#) (new, July 2016)
- [Michigan Guidebook to Environmental, Health and Safety Regulations](#) (revised May 2016)

Retail Environmental Workgroup: In November 2015, in an effort to assist retailers in achieving and maintaining compliance, the MDEQ established a Retail Environmental Workgroup. The workgroup's goal is to review the various unique retailer waste issues and produce [compliance assistance tool\(s\)](#) that are simple and easy to use; maximize compliance; minimize costs and liabilities; advocate best management practices that provide for pollution prevention, environmental protection, and safety; while promoting statewide consistency. More information on the workgroup can be found at the [Retail Environmental Workgroup Web page](#). Interested parties can subscribe to the [Retail Environmental Initiative](#) e-newsletter to receive [periodic updates](#) on workgroup progress or other resources or topics of interest. This web page will serve as the hub for MDEQ retail specific waste resources. The web page includes retail specific discussion details on topics like the [inspection process](#), [reverse distribution versus reverse logistics](#), Michigan's unique [universal waste regulations](#), as well as other resources related to meeting RCRA waste minimization goals like the U.S. EPA Pesticide Container Repair [Policy](#) and [Fact Sheet](#).

Pharmaceutical Waste: To combat the skyrocketing increase in opiate abuse and help healthcare meet the hazardous waste pharmaceutical regulations, the MDEQ launched a new DEQ Drug Disposal Web page in April 2016 which can be found at www.michigan.gov/deqdrugdisposal. The web page is a resource for both households and healthcare drug disposal resources. It includes a MDEQ two minute public service announcement titled [The Truth About Unwanted Medications](#) that highlights the environmental and public health issues surrounding pharmaceutical diversion and disposal, the September 25, 2015, proposed hazardous waste pharmaceutical rulemaking, the September 21, 2016, recorded pharmaceutical waste webinar, and much more.

Program Improvements

In late FY 2016, the MDEQ created a RCRA coordinator specialist position and filled the position in June 2016. This staff person will be coordinating with both district staff and central Lansing staff to continue to improve the overall management consistency and operation of the compliance and enforcement portion of the Program and to assist all staff with meeting the overall Program goals.

In late FY 2015, the MDEQ began a pilot program to implement a new software program (nSpect) to improve the accuracy and efficiency of staff field inspections. The pilot program had a few minor setbacks in FY 2016 due to staff retirements. The pilot program will continue on into FY 2017 with the goal of implementation in late FY 2017. This program will allow all inspection forms to be loaded onto Microsoft tablets that will be issued to all field staff. All Waste Database System (WDS) information will be loaded into the tablets. The nSpect program allows for handwriting recognition and GPS coordinates, mapping and photographs can be integrated into the inspection report that the program generates. The inspection report, when completed, is saved as a PDF file for electronic storage or it can be downloaded and printed. Upon return to the field office, staff will sync the tablet with WDS and transfer all inspection data into the WDS database. This will allow for timely input of all inspection data into WDS for migration into RCRAInfo.

In late FY 2016, District staff working with the Office of Environmental Assistance (OEA) interns created an access query to determine if a facility is accurately reporting the amount of hazardous waste generated monthly; for example, a Conditionally Exempt Small Quantity Generator (CESQG) that should have notified as a Large Quantity Generator (LQG). The preliminary data shows that a significant number of hazardous waste generators have miss-notified or have not updated their generator status. Currently, district staff is reviewing the data and they are planning their inspections accordingly to quality check the query results.

Coordinated District, Field Office, and Hazardous Waste Section Inspections Report

In FY 2016, the MDEQ continued to implement strategies that maximized resources and focused work effort in areas that maximized protection of the environment and public health. The MDEQ established a goal to inspect most active Treatment, Storage, and Disposal Facilities (TSDFs) four times per year consisting of a combination of Compliance Evaluation Inspections (CEIs) and Focused Compliance Inspections (FCIs) with a minimum of one CEI per facility. The District and Field Offices and the HWS coordinated, where possible, to complete these inspections at some TSDFs. In FY 2016, TSDF inspections were to include at least one District/Field Office CEI and the other inspections were to be a District/Field Office FCI or a HWS inspection such as a Groundwater Monitoring Evaluation (GME), Operation and Maintenance (O&M), Postclosure Cap (PC Cap), Corrective Action Cap (CA Cap), Corrective Action Maintenance and Monitoring (Camm), HWS FCI, or Corrective Action Compliance (CAC) Inspection. The MDEQ ensured that 20 percent of LQGs were inspected during the FY (including U.S. EPA-led inspections) so that LQGs are inspected at least once every five years and that hazardous waste (HW) transporters are inspected at least once every three years. By combining resources to complete TSDF inspections, District and Field staff are striving to complete a greater number of small quantity generator (SQG) and CESQG inspections to help facilities in these categories better understand and comply with hazardous waste management requirements. In FY 2016, the MDEQ combined used oil processor inspections, complaint investigations, and inspections conducted solely to evaluate LIB regulatory compliance with SQG and CESQG inspections to create a new inspection category referred to as "Other." The MDEQ's goal was to complete between 350 to 400 inspections in this "Other" category.

During FY 2016, District/Field Office staff exceeded their projections for TSDF, Transporter, and “Other” inspection completions as noted in the table below.

Inspection Category	District and Field Staff		Hazardous Waste Section Staff	
	FY 2016 Commitment	Inspections Completed	FY 2016 Commitment	Inspections Completed
TSDFs	50	55	13	15
LQGs	121	133	0	0
Transporters	Approximately 20	20	0	0
Other*	350-400	481	0	0

*Other includes SQG, CESQG, LIB only, Used Oil Processor, Follow-Up, Complaints, and site visit/survey inspections performed under the Part 111/121 regulatory program.

Inspections that are combined into the “Other” category include:

SQGs – 151
 CESQG’s – 113
 Used Oil Processors – 3
 LIB Only – 82
 Complaints – 132

Active TSD Facility Inspection Schedule with Commitment Number and Completion Dates

Active TSD Facility Inspection Schedule												
Site ID	Current Site Name	District CEIs		District FCIs		HWS O&M		HWS CMM		HWS PC Cap/CA Cap		District
MID092947928	Drug And Laboratory Disposal Inc	1	08/16/2016	3	12/14/2015 03/24/2016 06/27/2016							Kalamazoo
MID000820381	Pharmacia & Upjohn Co LLC	1	08/11/2016									Kalamazoo
MIR000001834	Beck Road Facility (UM)	1	07/20/2016					1	09/01/2016			Jackson
MID053343976	MSU Waste Storage Facility	1										Lansing
MID000724724	Dow Chemical Main Plant & Incinerator Complex	1	08/09/2016	1	03/15/2016	1	09/30/2016			1	09/30/2016 09/30/2016	Saginaw Bay
MID000809632	Dow Corning Midland Plant	1	08/24/2016		02/29/2016							Saginaw Bay
MID980617435	Dow Chemical Co - Salzburg Landfill	1	08/09/2016	1	10/28/2015	1	02/26/2016			1	12/15/2015	Saginaw Bay
MID000724831	Michigan Disposal Waste Treatment Plant	1	11/10/2015 03/22/2016 06/07/2016 09/13/2016	3								Southeast Michigan
MID005338801	Gage Products Co	1	09/15/2016	3	12/10/2015 03/24/2016 06/28/2016							Southeast Michigan

Active TSD Facility Inspection Schedule													
Site ID	Current Site Name	District CEIs		District FCIs		HWS O&M		HWS CAMM		HWS PC Cap/CA Cap		HWS FCI	District
MID048090633	Wayne Disposal Inc	2	11/24/2015 04/11/2016 06/10/2016 08/17/2016	2		1	09/14/2016				06/22/2016	11/06/2016	Southeast Michigan
MID060975844	EQ Resource Recovery Inc	1	12/01/2015	3	03/17/2016 05/20/2016 07/14/2016								Southeast Michigan
MID074259565	US Ecology Detroit North	1	12/09/2015 03/29/2016	3	06/09/2016 09/16/2016								Southeast Michigan
MID980615298	PSC Environmental Services	1	11/18/2015	3	03/31/2016 06/29/2016 09/29/2016								Southeast Michigan
MID980991566	EQ Detroit Inc	1	11/19/2015 03/22/2016	3	06/09/2016 08/25/2016								Southeast Michigan
MID985568021	Chemical Analytics Inc Romulus	1	10/02/2015	3	12/28/2015 04/26/2016 08/01/2016								Southeast Michigan
MIR000016055	Environmental Geo-Technologies	2	12/01/2015 07/14/2016	2	03/16/2016 05/20/2016								Southeast Michigan

NOTE: # Column represents number of commitments and Date Column represents number of inspections completed.

Closed TSD Facility Inspection Schedule with Commitment Number and Completion Dates

Closed TSD Facility Inspection Schedule													
Site ID	Current Site Name	District CEIs		District FCIs		HWS O&M		HWS CAMM		HWS PC Cap		HWS FCIs	District
MID980825632	MDNR Storage Facility Roscommon					1	08/03/2016						Cadillac
MID006013643	Warner Lambert Co LLC Former Manufacturing Site												Grand Rapids
MID006014666	Lacks Industries Inc					1	02/11/2016						Grand Rapids
MID006014906	Occidental Chemical Corp									1	09/13/2016		Grand Rapids
MID006025217	Barber Steel Foundry Corp												Grand Rapids
MID006407597	Former TDY Vehicle Systems												Grand Rapids
MID017079625	GM Components Holdings LLC												Grand Rapids
MID020906764	Trex Properties LLC			1	05/05/2016								Grand Rapids
MID080359433	Lacks Industries Inc Saranac												Grand Rapids

Closed TSD Facility Inspection Schedule													
Site ID	Current Site Name	District CEIs		District FCIs		HWS O&M		HWS CAMM		HWS PC Cap		HWS FCIs	District
MID980499735	Mahle Engine Components USA Inc												Grand Rapids
MID005057005	Ford River Raisin Warehouse												Jackson
MID009305665	Ford Motor Company - Saline Plant												Jackson
MID990760100	Chrysler Introl Division												Jackson
MID005356647	DPH ERT Flint Site Plant 400		09/28/2016										Lansing
MID005356712	RACER Buick City Plant												Lansing
MID005356860	RACER Coldwater Road Landfill												Lansing
MID005358130	MRP Alma Facility									1	08/25/2016		Lansing
MID082771700	Granger Grand River Landfill												Lansing
MID980506265	Grand Blanc Landfill					1	01/15/2016			1	06/08/2016		Lansing
MID980568620	DPH ERT Flint Site Plant 500		09/28/2016	1									Lansing
MID005513262	Metavation LLC												Saginaw Bay
MID041793340	Saginaw Nodular Industrial Land												Saginaw Bay
MID004508628	Former Wyckoff Steel Inc												Southeast Michigan
MID005356886	RACER Pontiac North Campus												Southeast Michigan
MID005356910	RACER Fiero Assembly Plant												Southeast Michigan
MID005378161	Green Clover Property LLC (Former MI Chrome & Chemical)		06/09/2016	1									Southeast Michigan
MID009708678	Solutia Inc East Property												Southeast Michigan
MID061862926	Intertape Polymer GRP												Southeast Michigan
MID000810408	Woodland Meadows Landfill North												Southeast Michigan

Closed TSD Facility Inspection Schedule													
Site ID	Current Site Name	District CEIs		District FCIs		HWS O&M		HWS CAMM		HWS PC Cap		HWS FCIs	District
MID980568711	Ford Motor Co Allen Park Clay Mine Landfill												Southeast Michigan
MI0571924760	Former US Air Force KI Sawyer AFB												Upper Peninsula

NOTE: # Column represents number of commitments and Date Column represents number of inspections completed.

U.S. EPA TSDF Inspections

Site ID	Current Site Name	Inspection Type	Inspections Date	District
MID006030357	CWC Castings Division Plant 3	CEI	02/23/2016	Grand Rapids
MID072575731	Honeywell International Inc. Burdick and Jackson	CEI	07/20/2016	Grand Rapids

Hazardous Waste Section Inspection Reports

With the exception of the Groundwater O&M to be completed at the Perma Fix of Michigan facility, HWS staff met 100% of the Compliance and Enforcement Inspection Commitments as specified in the Work Plan. The Groundwater O&M at the Perma Fix of Michigan facility was not completed because the facility's groundwater monitoring program was terminated prior to the inspection and the wells were acceptably abandoned as approved by the MDEQ. Refer to the table below for inspection details.

Current Site Name	Legal Site Name	Site ID	Evaluation Date	Evaluation Code	Evaluation Reason	Status
Dow Chemical Company-Salzburg Landfill	The Dow Chemical Company	MID980617435	02/26/2016	OAM		IC
Grand Blanc Landfill	Grand Blanc Landfill	MID980506265	01/15/2016	OAM		IC
Lacks Industries Inc	Lacks Industries Inc	MID006014666	02/11/2016	OAM		IC
Wayne Disposal Inc	Wayne Disposal Inc	MID048090633	09/14/2016	OAM		IC
Dow Chemical Main Plant & Incinerator Complex	The Dow Chemical Company	MID000724724	09/30/2016	OAM		IC
Perma Fix of Michigan	Perma Fix of Michigan	MID096963194	The MDEQ determined that groundwater standards were met at the facility, approved termination of groundwater monitoring on 8/12/2015, and the groundwater wells were subsequently abandoned.			
MI Dept/Nat Res Storage Facility Roscommon	MI Dept/Natural Resources	MID980825632	08/03/2016	OAM		IC
Grand Blanc Landfill	Grand Blanc Landfill	MID980506265	01/15/2016	OAM		IC
Dow Chemical Company-Salzburg Landfill	The Dow Chemical Company	MID980617435	12/15/2015	FCI	Post Closure Cap Inspection	IC

Current Site Name	Legal Site Name	Site ID	Evaluation Date	Evaluation Code	Evaluation Reason	Status
Occidental Chemical Corp	Occidental Chemical Corp	MID006014906	09/13/2016	FCI	Post Closure Cap Inspection	IC
Grand Blanc Landfill	Grand Blanc Landfill	MID980506265	06/08/2016	FCI	Post Closure Cap Inspection	IC
MRP Alma Facility	MRP Properties Co LLC	MID005358130	08/25/2016	FCI	Post Closure Cap Inspection	IC
Advanced Resource Recovery LLC	Advanced Resource Recovery LLC	MID057002602	12/09/2015	CAC	Corrective Action Monitoring-Maintenance Eval	IC
Lafayette Building (substitute for Rugged Liner CAMM)	Lafayette Building	MID076342708	07/26/2016	CAC	Corrective Action Monitoring-Maintenance Eval	IC
General Motors LLC	General Motors LLC	MID050615996	03/04/2016	CAC	Corrective Action Monitoring-Maintenance Eval	IC
Whirlpool Corp St Joseph Div PLTS 3-6	Whirlpool Corp	MID005477773	12/11/2015	CAC	Corrective Action Monitoring-Maintenance Eval	IC
U oF M Beck Road Facility	University of Michigan	MIR000001834	09/01/2016	CAC	Corrective Action Monitoring-Maintenance Eval	IC
Dow Chemical Main Plant & Incinerator Complex (Sites SE)	The Dow Chemical Company	MID000724724	09/30/2016	CAC		IC
Dow Chemical Main Plant & Incinerator Complex (Diversion Basin)	The Dow Chemical Company	MID000724724	09/30/2016	FCI	Post Closure Cap Inspection	IC

Refer also to the HWS Inspection information in the TSD Facility Inspection Schedule Tables on Pages 7 through 9 of this Report.

Enforcement Section Report

Significant Non-Compliers (SNCs) Reported in Current Fiscal Year ¹			
Name ²	Site ID	SNC Date ³	SNC Status
Diamond Chrome Plating Inc. ⁴	MID005344973	01/28/2016	SNY
Drug & Laboratory Disposal, Inc., Plainwell ⁵	MID092947928	03/07/2016	SNY

SNCs Reported in a Prior Fiscal Year			
Name	Site ID	SNC Date	SNC Status
Custom Heat Treat, Inc., Kingsford ⁶	MID985641448	09/17/2015	SNN
Electro Chemical Finishing Co., Wyoming ⁷	MID980990113	01/13/2015	SNN
Enbridge Energy Limited Partnership, Howell Pump Station ⁸	MIK266742550	07/30/2015	SNN
Regal Recycling LLC, Howell	MIK691312557	12/28/2005	SNY

Fast Track Administrative Consent Order (FTO)					
Name	Site ID	SNC Date	SNC Status	Enforcement Notice Issued and Proposed Consent Order Offered	FTO Entered
Custom Heat Treat, Inc., Kingsford ⁹	MID985641448	09/17/2015	SNN	12/01/2015	03/25/2016

¹ Nomenclature used throughout this report: "SNC" means Significant Non-Complier. "SNY" is the RCRAInfo code signifying that a facility owner and/or operator/generator/transporter is a SNC. "SNN" is the RCRAInfo code signifying that a facility owner and/or operator, generator or transporter is no longer a SNC. "N/A" means "not applicable" and "NFA" means "no further action".

² Legal name of entity. Additional information may be given under the name heading (e.g., previous owner(s)/operator(s), common name of facility, city located in, etc.) to assist in identifying the facility.

³ Date of determination.

⁴ Violation Notice issued March 21, 2016, and June 24, 2016. This is a multi-media case among the MDEQ Air Quality Division, OWMRP (lead division/office), and Water Resources Division. A Demand for Stipulated Penalties was issued to Diamond Chrome on August 2, 2016, for violations of the July 28, 2015, First Amended Consent Decree

⁵ Violation Notice issued March 7, 2016.

⁶ Violation Notice issued September 24, 2015. Enforcement Notice issued December 1, 2015.

⁷ Violation Notice issued December 26, 2014. This is a multi-media case among the MDEQ Air Quality Division, OWMRP, and Water Resources Division (lead division/office). Enforcement Notice issued May 13, 2015.

⁸ Violation Notice issued June 6, 2014. Enforcement Notice issued November 13, 2015.

⁹ The Consent Order entered with Custom Heat Treat, Inc. resulted in a settlement of \$6,000 to resolve the MDEQ's claim for a civil fine. Settlement payment received April 14, 2016.

Administrative Consent Order (CO)					
Name	Site ID	SNC Date	SNC Status	Enforcement Notice Issued and Proposed CO Offered	CO Entered
Electro Chemical Finishing Co., Wyoming ¹⁰	MID980990113	01/13/2015	SNN	05/13/2015	03/24/2016
Enbridge Energy Limited Partnership, Howell Pump Station ¹¹	MIK266742550	07/30/2015	SNN	11/13/2016	01/21/2016

Civil Enforcement						
Name	Site ID	SNC Date	SNC Status	Referral to Michigan Department of Attorney General (MDAG)	Draft Consent Judgment Offered	Civil Complaint and/or Judgment Filed
Regal Recycling LLC, Howell	MIK691312557	12/28/2005	SNY	08/17/2007	11/01/2007	

Criminal Enforcement					
Name	Site ID	SNC Date	SNC Status	Criminal Action Filed	Criminal Action Resolved

¹⁰ The Consent Order entered with Electro Chemical Finishing Co. resulted in a settlement of \$25,500.00 to resolve the MDEQ's claim for a civil fine for the hazardous waste violations alleged in this multi-media enforcement case. Settlement payment received April 14, 2016.

¹¹ The Consent Order entered with Enbridge Energy Limited Partnership resulted in a settlement of \$55,000 to resolve the MDEQ's claim for a civil fine. Settlement payment received February 9, 2016.

Bankruptcy Proceedings						
Name	Site ID	SNC Date	SNC Status	Referral to MDAG	MDEQ Claim Filed	Court Order Issued
DPH Holdings Corporation, <i>et al.</i> (formerly Delphi Corporation, <i>et al.</i>) ¹²	(Multiple Sites)	N/A	SNN	10/08/2005	Date Unknown	
Metavation, LLC, Vasser (Tuscola Co.) ¹³	MID005513262	N/A	SNN	12/13/2013	01/20/2014	
NM Holdings Company LLC, Grand Blanc and Grand Rapids (formerly Vemco, Inc. and Venture Holding Company LLC) ¹⁴	MID151368537 MID982642183	03/24/2003	SNN	04/29/2003	05/13/2003	

¹² Voluntary Chapter 11 petitions filed October 8, 2005. Referral to the MDAG for representation and filing of MDEQ's proof of claim for the corrective action costs at former Delphi Corporation sites. DPH Holdings Corporation, *et al.* are the Reorganized Debtors for the former Delphi Corporation, *et al.* This case is being jointly handled by the MDEQ Remediation and Redevelopment Division and the OWMRP, Hazardous Waste Section and Enforcement Section.

¹³ Voluntary Chapter 11 bankruptcy petition filed July 22, 2013. Referral to the MDAG for representation.

¹⁴ Also known as Venture Grand Blanc and Venture Grand Rapids. Voluntary Chapter 11 bankruptcy petition filed March 28, 2003. Converted to a Chapter 7 case on January 11, 2006. MDEQ's proof of claim was filed by the MDAG for the \$250,000 in penalties due from Vemco, Inc. under a February 19, 2003, Consent Judgment. Motion filed by the Trustee seeking substantive consolidation of the Debtors' estates in NM Holdings Company LLC *et al.* bankruptcy. The deadline for objections to the Motion was February 21, 2013. MDEQ did not object.

Michigan Department of Natural Resources (MDNR), Law Enforcement Division, Environmental Investigation Section, Hazardous Waste Program Support

In FY 2016, the MDNR, Law Enforcement Division, Environmental Investigation Section, provided non-grant funded support to the HWP through their work to conduct waste hauler vehicle and border patrols along with investigations/prosecutions of hazardous waste/RCRA-related cases as noted below.

Waste Hauler Vehicle Patrols: 0 waste-hauling vehicles inspected

Border Patrols: 0 vehicles inspected

Hazardous Waste/RCRA-Related Cases Opened: 2

Hazardous Waste/RCRA-Related Cases Closed with Conviction: 0

Hazardous Waste/RCRA-Related Cases Closed Compliance Gained Without Conviction: 0

FY 2016 Hazardous Waste/RCRA-Related Cases Opened		
Case #	Case Name	Initiation Date
16-010	* Midland Chemical Lab	12/01/2015
16-018	**Sargent's Recycling	01/19/2016

* At Prosecutor for review-suspect out of country

** Soon to be submitted to Prosecutor

FY 2016 Cases Closed with Conviction			
Case #	Case Name	Fines, Costs, & Restitution	Date

FY 2016 Cases Closed Compliance Gained Without Conviction		
Case #	Case Name	Date

Administrative Controls

U.S. EPA FY2014 – 2018 Strategic Plan, Goal 3: Cleaning Up Communities and Advancing Sustainable Development

Objective 3.2: *Preserve Land.* Conserve resources and prevent land contamination by reducing waste generation and toxicity, promoting proper management of waste and petroleum products, and increasing sustainable materials management.

In FY 2016, the MDEQ conducted work to issue/renew operating licenses and PC operating licenses, to process major/minor license modifications, to clean close regulated units, and to approve PC plans. In addition, the MDEQ entered into CA consent orders/legally enforceable agreements such that the Government Performance and Results Act of 1993 (GPRA) “approved controls in place” goals were achieved for 100 percent of the GPRA 2020 Permit Baseline.

Status of FY 2016 Administrative Controls Commitments

Operating License Renewal Application – Technical Adequacy, Public Notice Draft Operating License, and License Issuance Determinations

Chemical Analytics (MID985568021): The facility submitted notice to the MDEQ on September 16, 2016, that they intended to begin final closure of all of the hazardous waste management units at the facility on November 16, 2015. Refer to the table below for the list of closure activities completed during FY 2016.

Current Site Name	Site Legal Name	Site ID	Event Code	Event Description	Completion Date
Chemical Analytics Inc. Romulus	Stericycle Specialty Waste Solutions Inc.	MID985568021	CL411	Closure process begun according to plan	11/16/2015
Chemical Analytics Inc. Romulus	Stericycle Specialty Waste Solutions Inc.	MID985568021	CL370	Receive closure certification	12/28/2015
Chemical Analytics Inc. Romulus	Stericycle Specialty Waste Solutions Inc.	MID985568021	CL372CA	Review closure certification acceptable	03/17/2016
Chemical Analytics Inc. Romulus	Stericycle Specialty Waste Solutions Inc.	MID985568021	CL380CA	Closure verification - clean closure acceptable	03/21/2016
Chemical Analytics Inc. Romulus	Stericycle Specialty Waste Solutions Inc.	MID985568021	OP270	Permit expires	03/21/2016

Postclosure Operating License Renewal Application – Completeness Determinations

Current Site Name	Site Legal Name	Site ID	Event Code	Event Description	Comment	Completion Date
Woodland Meadows Landfill North	Waste Management of Michigan, Inc.	MID000810408	PC100	Notice of deficiency	Post-Closure Operating License Application Completeness NOD	03/09/2016
Woodland Meadows Landfill North	Waste Management of Michigan, Inc.	MID000810408	PC110	Revisions Received	Response to completeness NOD	05/05/2016
Woodland Meadows Landfill North	Waste Management of Michigan, Inc.	MID000810408	PC403CO	Application Reviewed for Completeness Complete		05/24/2016

Progress towards the Woodland Meadows Landfill North (MID000810408) Postclosure Operating License Issuance:

Following the HWS's determination that Woodland Meadow's Postclosure Operating License Application was administratively complete, staff began their technical adequacy review. When Woodland Meadows submitted their comments to the MDEQ responding to the completeness notice of deficiency, they contended that they were near the end of postclosure and questioned the MDEQ's ability to extend the post-closure care period. Despite that contention, the HWS began the technical review of the application and the company was told that the MDEQ intended to extend the facility's postclosure care period and that they would need to provide adequate financial assurance to cover postclosure care (e.g., the amount of the financial assurance must be such that the funds, if deposited into an interest bearing account, would be sufficient to cover the annual postclosure work cost in the unforeseen event that the company abandons the landfill and postclosure care becomes the responsibility of the state). While the company has acknowledged their responsibility to continue with some maintenance of the landfill, they have been reluctant to provide the financial assurance determined to be necessary for license issuance. The MDEQ will be resolving this issue with the company in FY 2017 and issuing the PC operating license.

EQ Detroit (MID980991566) Operating License Technical Adequacy Determination, Public Notice Draft Operating License, and Operating License Reissuance:

The HWS was unable to achieve these commitments in FY 2016 because the project manager for the facility was the same person that was assigned to work on the highly controversial US Ecology North operating license renewal and application for an expansion. This same person was also in charge of the WDS database, WDS translations into RCRAInfo, biennial reporting, and he was serving as the Acting Unit Chief of the HWS Management and Tracking Unit from April 2016 through the end of the FY in the absence of a permanent Unit Chief. This commitment has been deferred to FY 2017.

Non-Commitment Administrative Controls Completions

Progress towards the U.S. Ecology Detroit North (MID074259565) Operating License Issuance:

In FY 2016, HWS staff worked on the US Ecology Detroit North operating license responsiveness summary. The U.S. EPA Region 5 staff performed a permit audit of the draft operating license. The overall findings from the audit showed that there were no significant deficiencies in the areas of EJ analysis, financial assurance, quality assurance, public noticing, enforceability, or other pertinent areas. While this was the case, the U.S. EPA did raise some questions from their review of the facility's Waste Analysis Plan and they plan to follow up with the MDEQ to discuss and hopefully resolve these issues prior to license issuance. In addition, staff held meetings and drafted and sent communications to city and county officials regarding the highly controversial operating license issuance. The MDEQ anticipates issuing the operating license by the end of the 2016 calendar year.

Operating License Modifications

Substantive work was conducted during FY 2016 in completing major and minor operating license modifications. The MDEQ requests that this modification work be recognized as "substitution" work for the administrative controls that were not completed in FY 2016 (U.S. Ecology North and Woodland Meadows Landfill North postclosure operating licenses). The modifications are listed below:

Current Site Name	Site Legal Name	Site ID	Event Code	Event Description	Comment	Date
Dow Chemical Company-Salzburg Landfill	The Dow Chemical Company	MID980617435	OP231MN	Class Determination-Minor	Cells 20-22 Final Cover Design	05/19/2016
Dow Chemical Company-Salzburg Landfill	The Dow Chemical Company	MID980617435	OP240OH	Modification Approved - Other Modification	Cells 20-22 Final Cover Design	05/19/2016
Dow Chemical Company-Salzburg Landfill	The Dow Chemical Company	MID980617435	OP231MN	Class Determination-Minor	Minor Mods under Part XII Schedule of Compliance: Topo Map, Cont. Plan, Pers. Tr.	11/06/2015
Dow Chemical Company-Salzburg Landfill	The Dow Chemical Company	MID980617435	OP240OH	Modification Approved - Other Modification	Minor Mods under Part XII Schedule of Compliance: Topo Map, Cont. Plan, Pers. Tr.	01/26/2016
Dow Chemical Main Plant & Incinerator Complex	The Dow Chemical Company	MID000724724	OP23111	Class Determination-Class 1 Modification - Prior Approval Required	Piezometer 3391 Relocation	05/12/2016
Dow Chemical Main Plant & Incinerator Complex	The Dow Chemical Company	MID000724724	OP240GW	Modification Approved - Groundwater Monitoring	Amendment 2 Piezometer 3391 Relocation	05/12/2016

Current Site Name	Site Legal Name	Site ID	Event Code	Event Description	Comment	Date
Dow Chemical Main Plant & Incinerator Complex	The Dow Chemical Company	MID000724724	OP231MJ	Class Determination-Major	Revised Corrective Action Report, Midland Area Soils Attachment 18	07/21/2016
Dow Chemical Main Plant & Incinerator Complex	The Dow Chemical Company	MID000724724	OP240CA	Modification Approved - Corrective Action	Revised Corrective Action Report, Midland Area Soils Attachment 18	07/21/2016
Dow Chemical Main Plant & Incinerator Complex	The Dow Chemical Company	MID000724724	OP231MN	Class Determination-Minor	Amendment 4 Waste Storage Area I Dike Concrete Replacement	06/03/2016
Dow Chemical Main Plant & Incinerator Complex	The Dow Chemical Company	MID000724724	OP240OH	Modification Approved - Other Modification	Amendment 4 Waste Storage Area I Dike Concrete Replacement	06/03/2016
Dow Chemical Main Plant & Incinerator Complex	The Dow Chemical Company	MID000724724	OP231MN	Class Determination-Minor	Minor Mods under Part XII Schedule of Compliance: Topo Map, Cont. Plan, Pers. Tr.	10/16/2015
Dow Chemical Main Plant & Incinerator Complex	The Dow Chemical Company	MID000724724	OP240OH	Modification Approved - Other Modification	Minor Mods under Part XII Schedule of Compliance: Topo Map, Cont. Plan, Pers. Tr.	01/26/2016
Environmental Geo-Technologies LLC	Environmental Geo-Technologies LLC	MIR000016055	OP231MN	Class Determination-Minor	Air filter replacement in kind, lab packs, inventory form revisions	03/01/2016
Environmental Geo-Technologies LLC	Environmental Geo-Technologies LLC	MIR000016055	OP240OH	Modification Approved - Other Modification	Air filter replacement in kind, lab packs, waste inventory log	03/08/2016
Environmental Geo-Technologies LLC	Environmental Geo-Technologies LLC	MIR000016055	OP231MN	Class Determination-Minor	Mixture and derived from waste codes per UIC permits	02/18/2016
Environmental Geo-Technologies LLC	Environmental Geo-Technologies LLC	MIR000016055	OP240OH	Modification Approved - Other Modification	Mixture and derived from waste codes per UIC permits	03/04/2016
EQ Detroit Inc	US Ecology	MID980991566	OP231MN	Class Determination-Minor	Replace smoke detectors with smoke/heat detectors.	04/11/2016
EQ Detroit Inc	US Ecology	MID980991566	OP231MN	Class Determination-Minor	Contingency plan update Figure G-1 emergency contacts	04/12/2016
EQ Detroit Inc	US Ecology	MID980991566	OP231MN	Class Determination-Minor	Site improvements, electrical panels and storm sewer	04/14/2016
Michigan Disposal Waste Treatment Plant	Michigan Disposal Inc	MID000724831	OP231MN	Class Determination-Minor	Modification to update license attachments due to closure of pug mill (Tank14) and the installation of West Bay cleaning trench.	12/14/2015

Current Site Name	Site Legal Name	Site ID	Event Code	Event Description	Comment	Date
Michigan Disposal Waste Treatment Plant	Michigan Disposal Inc	MID000724831	OP240OH	Modification Approved - Other Modification	Modification to update license attachments due to closure of pug mill	01/25/2016
PSC Environmental Services	Petro-Chem Processing Group of Nortru LLC	MID980615298	OP231MN	Class Determination-Minor	Ambient Air Monitoring	07/13/2016
PSC Environmental Services	Petro-Chem Processing Group of Nortru LLC	MID980615298	OP240OH	Modification Approved - Other Modification	Ambient Air Monitoring	07/13/2016
U of M Beck Road Facility	University Of Michigan	MIR000001834	OP240OH	Modification Approved - Other Modification	Minor modifications to contingency plan - annual updates	08/09/2016
Wayne Disposal Inc	Wayne Disposal Inc	MID048090633	OP231MN	Class Determination-Minor	Request for Minor Modification to revise the Leachate System Maintenance SOP and the Attachment 2 Inspection Schedule	04/20/2016
Wayne Disposal Inc	Wayne Disposal Inc	MID048090633	OP240OH	Modification Approved - Other Modification	Minor Mod for Leachate System Maintenance SOP and the Attachment 2 Inspection Schedule approval.	08/16/2016

Corrective Action

U.S. EPA FY2014 – 2018 Strategic Plan, Goal 3: Cleaning Up Communities and Advancing Sustainable Development

Objective 3.3: *Restore Land.* Prepare for and respond to accidental or intentional releases of contaminants and clean up and restore polluted sites for reuse.

Goal for FY 2016 CA Accomplishments

In FY 2016, the MDEQ committed to apply available resources at a pace that will enable the meeting of the following milestones for the MDEQ-lead GPRA 2020 CA Universe facilities by the end of the FY:

- Human exposures controlled at 88 percent of the MDEQ-lead sites; the MDEQ is not proposing to complete any CA725 Environmental Indicators (EIs) in FY 2016. Of the 85 Michigan-lead GPRA 2020 facilities, only 10 sites remain where this EI has not been met. While the MDEQ is not proposing to complete any CA725s this FY, the agency is committing to complete CA Oversight at several facilities that have not had active staff involvement for the past several years so as to re-initiate communication with the facility and to move them forward towards CA completions. In addition, the MDEQ is committed to continuing with CA oversight at several remaining sites where work is ongoing with the goal of achieving this EI at a substantial number of them in FY 2017-2018.
- Contaminated groundwater controlled at 88 percent of the MDEQ-lead sites (EI achieved at one additional facility in FY 2016). Of the 85 Michigan-lead GPRA 2020 facilities, only 11 sites remain where this EI has not been met. While the MDEQ is proposing to complete only one CA750 this FY, the agency is committing to complete CA Oversight several facilities that have not had active staff involvement for the past several years so as to re-initiate communication with the facility and to move them forward towards CA completions. In addition, the MDEQ is committed to continuing with CA oversight at several remaining sites where work is ongoing with the goal of achieving this EI at a substantial number of them in FY 2017-2018.

- Complete construction of final remedies at 59 percent of the MDEQ-lead sites (EI achieved at four additional facilities in FY 2016).
- Achieve performance standards attained (CA900/CA999) at 29 percent of the MDEQ-lead sites (EI achieved at six additional facilities in FY 2016).

FY 2016 Commitment Status

CA Oversight (CA001)

The MDEQ completed CA oversight activities at 100 percent of the facilities listed on the Corrective Action FY 2016 Hazardous Waste Section Work Schedule of the Work Plan. The work activities included meetings, technical reviews, and communications, along with field work. A list of the CA oversight activities completed during FY 2016 is included in Appendix 1A and Appendix 1B of this report.

Enforcement Technical Support (CA085)

The MDEQ completed enforcement technical support at 100 percent of the facilities listed on the Corrective Action FY 2016 Hazardous Waste Section Work Schedule of the Work Plan. Refer to the table below for details.

Current Site Name	Site Legal Name	Site ID	Event Code	Event Description	Comment	Completion Date
Former TDY Vehicle Systems	Teledyne Vehicle Systems	MID006407597	CA085	Enforcement Technical Support	Statement of Work review for CACO.	10/05/2015
Former TDY Vehicle Systems	Teledyne Vehicle Systems	MID006407597	CA085	Enforcement Technical Support	CAFO Restrictive Covenant Attachments Initial MDEQ comments Meeting	06/09/2016
Former TDY Vehicle Systems	Teledyne Vehicle Systems	MID006407597	CA085	Enforcement Technical Support	CAFO: Restrictive Covenants Meeting	08/18/2016
Former TDY Vehicle Systems	Teledyne Vehicle Systems	MID006407597	CA085	Enforcement Technical Support	CAFO Development: RCRA First Elevation of RC Issues	09/02/2016
Former TDY Vehicle Systems	Teledyne Vehicle Systems	MID006407597	CA085	Enforcement Technical Support	CAFO Restrictive Covenants Negotiation	09/19/2016
Former TDY Vehicle Systems	Teledyne Vehicle Systems	MID006407597	CA085	Enforcement Technical Support	CAFO Development Conference Call	09/23/2016
Midlink Business Park	5200 East Cork St Investors LLC	MID001876663	CA085	Enforcement Technical Support	Meeting with facility and consultants to move corrective action forward.	02/10/2016
Montague Works	Chemours Company FC LLC	MID000809640	CA085	Enforcement Technical Support	Began drafting Enforcement Referral for creation of a Corrective Action Order	02/11/2016

Current Site Name	Site Legal Name	Site ID	Event Code	Event Description	Comment	Completion Date
Enthone OMI Inc	Enthone OMI Inc	MID056717747	CA085	Enforcement Technical Support	Corrective Action Long-term Agreement template provided to Specialty Products Corp, who acquired corrective action obligations when they acquired Alent, Inc.	02/11/2016

Corrective Action Consent Orders or Corrective Action Long-Term Agreements

Site Name	Site ID	Initial Referral Date	Informal Referral to AG	Draft Issued	CACO* or CALTA** Entered
L3 Communications – Combat Propulsion Systems (former TDY Vehicle Systems site)	MID006407597	04/02/2012	06/28/2012	09/26/2012	Negotiations Ongoing
Status: On October 6, 2014, Respondent DOD and DOJ submitted a draft Consent Decree for review by the Michigan Department of Attorney General (MDAG) and MDEQ. On March 23, 2015, the MDEQ submitted comments to Respondents on the draft Scope of Work and Consent Decree. Meetings were held on June 10, 2015 and September 19, 2016, and a teleconference call was held on September 23, 2016, with DOD, DOJ and Respondents (the current and former owner/operators).					
Alent, Incorporated (former Enthone OMI, Inc. site)	MID056717747	09/04/2013	None	10/02/2013	Reevaluating the need for a CALTA due to a property ownership change
Status: On 02/11/2016, the MDEQ provided the template for a CACO to Platform Specialty Products Corp, the entity that acquired corrective action obligations for the facility due to ownership change.					
Trex Properties LLC, Grand Rapids (former Detrex Corporation site)	MID020906764	10/10/2014	–	Under Development	–
Status: A Voluntary Corrective Action Agreement (VCAA) was entered on 09/11/2015; Due to newly identified concerns at the facility and the facility's inability to provide adequate reports to the MDEQ, a CACO was determined to be necessary and a draft is under development.					
WHP Investments, Inc. (former Reichhold, Inc. site)	MID020087128	10/21/2013	10/01/2014	–	02/17/2016 (West) 02/29/2016 (V-Bldg)
Status: Two CALTAs entered with subsequent property owner of portions of the former Reichhold, Inc. site. The CALTA entered on February 17, 2016, with WHP Investments, Inc. pertains to the West Area portion of the property. The CALTA entered on February 29, 2016, with WHP Investments, Inc. pertains to the V-Building portion of the property. The East Area portion of the site is currently only covered by the bankruptcy; however, a potential purchase and entry of a CALTA is under discussion with Five Star Store It Ferndale, LLC (Five Star). The last contact with the attorney for Five Star was in May 2016. MDEQ is seeking to resume those discussions.					

* Corrective Action Consent Order – CACO

** Corrective Action Long-Term Agreement – CALTA

GPRA CA725 Human Exposures Controlled Determinations

The MDEQ had no commitments for CA725 completions in FY 2016 and none were accomplished during the FY.

GPRA CA750 Groundwater Controlled Determinations

During FY 2016, the MDEQ completed two determinations for this EI. Refer to the table below for details.

Current Site Name	Site Legal Name	Site ID	Event Code	Completion Date
Selfridge Air National Guard	US Dept/Defense	MID099113128	CA750YE	09/13/2016
General Motors LLC - Lansing Plant 1	General Motors LLC	MID005356894	CA750YE	09/21/2016

GPRA CA550 Construction Complete Determinations

During FY 2016, the MDEQ completed one determination for this EI. Refer to the table below for details.

Current Site Name	Site Legal Name	Site ID	Area Name	Event Code	Completion Date/Comments
RACER Romulus Industrial Land*	Revitalizing Auto Communities Environmental Response Trust	MID000809905	Entire Facility	CA550NR	10/30/2015
Ford Motor Company - Saline	Ford Motor Company	MID009305665	Entire Facility	CA550 - Unable to meet due to waste characterization issue that needed to be resolved prior to scheduling work. Issue was resolved in late FY 2016 and final work is scheduled to be completed in early FY 2017.	
Chrysler Introl Division (CorePointe)	Old Carco LLC	MID990760100	Entire Facility	CA550 - Unable to meet due to unresolved multiple property owner restrictive covenant issues. MDEQ is working on new approach to ensure agreement amongst CorePointe Insurance and all property owners before CA documents are submitted for approval.	
Former GM Plant Saginaw Malleable Iron	Revitalizing Auto Communities Environmental Response Trust	MID005356696	Entire Facility	CA550 - Unable to meet. TSCA coordinated approval issued in late FY 2016. Cleanup work scheduled for completion in early FY 2017.	
Former Peregrine Coldwater Road Site	Revitalizing Auto Communities Environmental Response Trust	MIR000020743	Entire Facility	CA550 – Unable to meet. Chrome plating at the facility necessitates an evaluation as to whether PFOA and PFOS are contaminants of concern at the site. The facility has acknowledged this issue and plans to proceed with additional work to address this issue.	

*Not a FY 2016 CA550 commitment – Used as a substitute for one of the CA550 EI commitments that could not be met.

GPRA CA900/CA999 Performance Standards Attained Determinations

During FY 2016, the MDEQ completed five determinations for this EI. Refer to the table below for details.

Current Site Name	Site Legal Name	Site ID	Area Name	Event Code	Completion Date
RACER Romulus Industrial Land*	Revitalizing Auto Communities Environmental Response Trust	MID000809905	Entire Facility	CA900CR	12/22/2015
General Motors LLC	General Motors LLC	MID050615996	Entire Facility	CA900CR	02/29/2016
Intertape Polymer GRP	Intertape Polymer Corporation	MID061862926	Entire Facility	CA900CR	10/05/2015
RACER Bay City Industrial Land	Revitalizing Auto Communities Environmental Response Trust	MID005356688	Entire Facility	CA900CR	09/28/2016
EQ Detroit Inc	US Ecology	MID980991566	Entire Facility	CA900CR	06/23/2016
Rugged Liner Inc.	Rugged Liner Inc.	MID058816927		CA900 – Unable to meet. Company unresponsive to MDEQ request to prepare/submit necessary restrictive covenant.	

*Not a FY 2016 CA900 commitment – Used as substitute for Mahle Engine Components USA Inc. CA900/CA999 commitment that could not be met.

Non-Commitment CA Accomplishments

Enforcement Technical Support

Reichhold Chemical (MID020087128): During FY 2016, HWS staff spent significant time working on enforcement technical support for the facility, a GPRA site located in Ferndale, Michigan. Manufacturing operations took place from 1927–1989; after operations ceased, the facility implemented CA activities that included soil removal, groundwater extraction, in-situ chemical oxidation, and dual phase (groundwater and soil gas) extraction. All buildings at the site were demolished to ground level in 1995. On July 15, 2014, the MDEQ and Reichhold entered into an “Agreement for a Corrective Action” as a formal means to address the facility’s CA obligations. On September 30, 2014, Reichhold filed for bankruptcy and the MDEQ drew on and obtained the facility’s corrective action financial assurance Letter of Credit for \$719,113.

Early in FY 2016, several parties came forward and indicated interest in purchasing portions of the Reichhold property. In February 2016, the West Area and the V-Shaped Building (south end of the East Area) were purchased by WHP Investments, Inc., who subsequently entered two (2) Agreements (Corrective Action Long Term Agreements) with the MDEQ to memorialize necessary steps for CA completion and implementation of long-term controls. Following entry of the agreements, restrictive covenants detailing controls and requirements for each area were filed on the properties and the MDEQ approved WHP Investment, Inc.’s Corrective Measures Implementation (CMI) plans. Financial assurance was agreed upon in May 2016, and a small change in the environmental monitoring schedule was approved in August 2016. The remaining part of Reichhold’s property, covering approximately the north 75 percent of the East Area, has been redeveloped into a self-storage business. No purchasers have voiced interest in that East Area parcel, and contaminants above relevant Part 201 criteria (soil, groundwater, soil gas) remain to be addressed in this area.

Polar Environmental Service Corporation (MID020087128): During FY 2016, the MDEQ provided Enforcement Technical Support to the U.S. EPA on this U.S. EPA lead project as follows:

Current Site Name	Site Legal Name	Site ID	Event Description	Date	Comment
Polar Environmental Service Corporation	Polar Environmental Service Corporation	MID093826733	Enforcement Technical Support	12/29/2015	Approval of Closure Plan and Closure Plan Amendment in support of EPA's enforcement action for a Used Oil Processor that triggered the rebuttable presumption. Only applies to certain tanks and the property is not subject to corrective action.

CA Oversight

Mt. Pleasant former Dow/Dowell/Schlumberger Dioxin Site: In early November of 2015, Dow Chemical notified the HWS of the discovery of a potential dioxin site in Mt. Pleasant. This is a former Dow facility that produced bromine in the early 1900s. The bromine production ceased in the late 1920's and the site was taken over by Dowell and Schlumberger. Dow contacted the HWS because of the discovery of graphite electrode rods associated with bromine production that are similar to those found on the Midland Plant Site. This site is primarily being addressed for arsenic contamination associated with the Dowell/Schlumberger operations (hazardous waste levels of arsenic are present in contaminated media). While this facility is not subject to RCRA corrective action, the HWS was asked to provide technical support to the Remediation and Redevelopment Division (RRD) of the MDEQ. This facility is located upstream of the Dow Chemical Midland site on the Chippewa River and therefore could have some influence on background levels and corrective action work in the Tittabawassee River downstream of the Dow Midland facility. HWS staff have spent several hundred hours of field and office time providing technical assistance to the RRD, including onsite and offsite investigation and sampling; meeting with Dow; developing and reviewing sampling and remediation plans; planning fish sampling; conducting data reviews; coordinating with the Michigan Department of Health and Human Services; and providing community outreach. The facility is located on Saginaw Chippewa Indian Tribal lands and both the State and the U.S. EPA are coordinating with the Saginaw Chippewa Indian Tribe.

OxyChem Ludington (formerly Dow Ludington) (MID006016919): This facility is a U.S. EPA RCRA lead facility that is currently subject to corrective action. However, Dow, the former owner, retains environmental liability for the site. Dow believes the site is not subject to corrective action and has provided some documentation to the U.S. EPA and the State to indicate that they filed protectively and never stored, treated, or disposed of hazardous waste at the Ludington facility. The U.S. EPA has not yet made a determination as to whether the facility is subject to RCRA corrective action. In the interim, Dow has begun work on the interim closure of the site's wastewater treatment ponds that contain lime solids and ash. The ponds are currently discharging contaminants at unacceptable levels to the surrounding water bodies and the exposed lime solids are a direct contact hazard to wildlife. Dow plans to donate surrounding ecologically valuable property to the local community and conservation groups. The HWS is working with the U.S. EPA and Michigan's Part 115 Program to ensure that any closure activities meet the current owner's corrective action obligations. Significant HWS staff time and resources were expended during FY 2016 to support investigation and remedy efforts at this U.S. EPA lead facility.

100 E. Patterson LLC (formerly known as Tecumseh Products Co Inc. and Tecumseh Compressor Company) (MID005049440): This facility is a U.S. EPA RCRA lead facility that is currently undergoing corrective action. During FY 2016, the MDEQ provided assistance and support to the U.S. EPA Region 5 on the Tecumseh Products project in the following areas:

- Assisted in the investigation and evaluation of compliance of the facility's proposed corrective measures with respect to the Groundwater to Surface Water Interface GSI and Vapor Intrusion (VI) pathways.
- Provided review and evaluation of compliance of the facility's proposed restrictive covenant and institutional controls to be implemented as part of the recommended corrective measures at the facility.
- Provided technical and administrative consult regarding the project and the proposed corrective measures to both Michigan legislator's and a prospective purchaser.
- Specific project related support activities and the dates for their completion are summarized in Appendix 2, Support on U.S. EPA lead projects, at the end of this report.

Appendix 2 at the end of this report contains a list, and summary details, of all of the non-commitment CA Oversight work activities completed by HWS staff during FY 2016.

MDEQ/U.S. EPA Coordinated Approvals for Polychlorinated Biphenyl (PCB) Clean-ups

In order to facilitate PCB clean-ups and eliminate duplication of efforts when PCB remediation is needed at RCRA CA sites, the MDEQ and the U.S. EPA have been working cooperatively for coordinating approvals pursuant to Title 40 of the Code of Federal Regulations (CFR) §761.77 (Toxic Substances Control Act [TSCA] coordinated approvals) during FY 2016. During FY 2016, the MDEQ worked with U.S. EPA and the RACER Trust on a coordinated approval for the Saginaw Malleable Iron property, Saginaw, Michigan (MID 005 356 696). In follow-up to the HWS presentations on TSCA coordinated approvals that were given at three locations throughout the state in September and October of 2015, the MDEQ is now receiving a large number of requests for information and consultations on PCB cleanups. Information, assistance, and referrals have involved a few brownfield redevelopment sites, sediment remediation sites, and general TSCA applicability and options inquiries. These requests have shown that there needs to be additional considerations for PCB remediation outside the Part 111/RCRA coordinated approval process. The MDEQ and the U.S. EPA have been working together to determine options for other MDEQ programs (e.g., Part 201) to take advantage of the coordinated approval process to move Michigan's PCB cleanups forward more quickly and efficiently and on a memorandum of agreement for addressing PCB cleanups and conducting coordinated approvals once the Part 201 cleanup criteria rules are promulgated.

The Part 201 Amendments, Criteria Updates, and Criteria Rule Revisions with Potential Impacts on RCRA/Part 111 Corrective Action in Michigan

In Michigan, Part 111, Hazardous Waste Management, uses environmental protections standards pursuant to Part 201 for corrective action. In 2000, the U.S. EPA and the MDEQ entered into a memorandum of understanding (MOU) to aid in the implementation of RCRA CA requirements at Michigan facilities recognizing the use of the Part 201 cleanup criteria and associated processes for Part 111 corrective action to fulfill the RCRA corrective action obligations in Michigan. In 2002, the U.S. EPA and the MDEQ entered into a technical addendum that provided some additional technical detail related to substantive technical requirements. Because Part 201 has undergone several statutory changes since the U.S. EPA and the MDEQ entered into the MOU and the technical addendum, the agencies have agreed that an update to the MOU is needed.

During FY 2016, the HWS Toxicologists spent significant time working with RRD to update the Part 201 generic cleanup criteria that have historically been used for Part 111/RCRA corrective action in Michigan; updated criteria are critical to the updated MOU that is under development. The HWS toxicologists, in coordination with RRD toxicologists, reviewed and documented available toxicity information for over 300 hazardous substances for updates to the Part 201 cleanup criteria. HWS toxicologists also assisted in the revision and review of the Part 201 criteria rules and quality assurance evaluation of 113 equations. In addition, the HWS toxicologists worked with members of the Children's Environmental Health Subcommittee of the Toxics Steering Group to revise a process to address developmental toxicants for use in generating Part 201 cleanup criteria and worked with the RRD

toxicologists to implement the process for 68 hazardous substances. The HWS toxicologists have also provided assistance in answering questions and responding to comments received related to the proposed Part 201 criteria rules.

The MDEQ has also made a commitment to the U.S. EPA to develop a compliance assistance document that will lay out what provisions of Part 201 apply to Part 111/RCRA corrective action. The MDEQ intends to develop this compliance assistance tool in conjunction with the U.S. EPA and expects to share a draft document in the winter of FY 2017, depending on the promulgation of the Part 201 criteria rules. The U.S. EPA has already provided direction on the Michigan Occupational Safety and Health Administration provisions found in § 324.20120a(18). After the MDEQ completes the cleanup criteria update and compliance assistance document, the agency will proceed to draft the MOU for U.S. EPA review and comment.

Financial Capability

U.S. EPA FY2014 – 2018 Strategic Plan, Goal 3: Cleaning Up Communities and Advancing Sustainable Development

Objective 3.3: *Restore Land.* Prepare for and respond to accidental or intentional releases of contaminants and clean up and restore polluted sites for reuse.

In FY 2016, the MDEQ continued to review budgets and expenditures under the settlement and trust agreements for the RACER Trust and for CorePointe Insurance Company (formerly Chrysler Insurance Company), in follow up to the bankruptcies in FY 2011; completed financial record reviews at all facilities that maintain financial assurance in Michigan, which currently includes a total of 54 facilities with financial mechanisms; and entered data into Michigan's Waste Data System (WDS) for translation to the federal RCRAInfo database to demonstrate that reviews had been completed.

FY 2016 Year Accomplishments

RACER Trust

The MDEQ approved the 2016 budgets for the Lansing Plants 2, 3, and 6, and Romulus Engineering facilities under the RACER Trust on December 10, 2015, and for the two former Flint Coldwater Road facilities on December 14, 2015. The MDEQ based the approvals on technical and cost estimate reviews by the project teams. The RACER Cost Estimating software was used as necessary to provide additional information.

Former Chrysler Introl Division PC Care and CA

The surety, CorePointe Insurance Company, continues to conduct work at the facility based on failure of Chrysler Corporation to conduct PC care and CA under an expanded PC Plan at the facility. A surety bond was provided for PC care at the facility, and CorePointe Insurance Company elected to perform PC care at the facility rather than forfeit the bond as part of bankruptcy proceedings.

The work agreement associated with completion of PC care and CAs at the facility specifies work that is to be conducted at the facility and that approved work is to be reimbursed quarterly based on receipts. Based on work completed in FY 2016, the MDEQ approved a reduction in the bond amount to \$490,455.86 based on work reported through September 30, 2016. Technical aspects of the work are reviewed by the project team for a final recommendation to management. The RACER Cost Estimating software was used as necessary to provide additional information.

Financial Record Reviews

In FY 2016, the MDEQ completed 85 financial record reviews at the 54 facilities. Some facilities required multiple reviews (especially the operating facilities). With these completions, the MDEQ accomplished reviews of 100 percent of the facilities providing financial mechanisms to date. The completed financial reviews are summarized in the table below.

*	**	Site Legal Name	Site ID	Completed	Review Comments
1	1	ACCESS BUSINESS GROUP LLC	MID006026793	09/14/2016	In Compliance Determination for Letter of Credit used to demonstrate financial assurance for corrective action.
2	2	AK STEEL CORPORATION	MID087738431	03/31/2016	Corrective Action FT information in compliance.
3	3	BACKER LANDSCAPING INC	MID006523385	04/15/2016	Financial Capability Reminder to submit current cost estimate for corrective action by June 4, 2016.
4		BACKER LANDSCAPING INC	MID006523385	07/13/2016	In Compliance Determination for demonstrating financial assurance for corrective action.
5	4	BARBER STEEL FOUNDRY CORP	MID006025217	09/1/2016	Written consent to release the funds in certificate of deposit held by Fifth Third Bank. Barber Steel released from the obligation to maintain financial assurance for post-closure care on August 17, 2016.
6	5	BLACK RIVER SCHOOLS	MID006411953	05/12/2016	Financial Capability Reminder to Update Cost Estimate and Financial Assurance.
7		BLACK RIVER SCHOOLS	MID006411953	07/13/2016	In Compliance Determination for demonstrating financial assurance for corrective action.
8	6	CYTEC INDUSTRIES INC	MID005360680	05/3/2016	DEQ Notice for Alternate Financial Assurance. The current issuer for Cytec letter of credit notified DEQ on April 22, 2016 that it will not be extending the maturity date.
9		CYTEC INDUSTRIES INC	MID005360680	09/28/2016	In Compliance Determination Financial Assurance for Corrective Action.
10	7	DOW CORNING CORPORATION	MID000809632	03/21/2016	Financial Test information in compliance.
11	8	DPH ENVIRONMENTAL RESPONSE TRUST	MID005356647	10/12/2015	Annual Trust valuation requested.
12	9	DPH ENVIRONMENTAL RESPONSE TRUST	MID980568620	10/12/2015	Annual trust valuation requested
13	10	DRUG AND LABORATORY DISPOSAL INC	MID092947928	07/12/2016	Reminder letter to submit required amendatory endorsement forms for liability insurance policy.
14		DRUG AND LABORATORY DISPOSAL INC	MID092947928	08/3/2016	Financial Capability Reminder to submit current cost estimate for closure.
15		DRUG AND LABORATORY DISPOSAL INC	MID092947928	09/26/2016	In Compliance Determination letter for providing financial assurance for pollution liability insurance.
16	11	DYNO NOBEL INC	MID041413154	05/17/2016	Financial Capability Reminder to submit current cost estimate for corrective action by July 14, 2016.
17		DYNO NOBEL INC	MID041413154	08/1/2016	Incompliance Determination for financial assurance for corrective action.
18	12	EI DUPONT FLINT SITE	MID005512066	10/2/2015	submit the current corrective action cost estimate
19		EI DUPONT FLINT SITE	MID005512066	09/20/2016	Financial Capability Reminder letter to submit current cost estimate for performing corrective action.
20	13	ENVIRONMENTAL GEO-TECHNOLOGIES LLC	MIR000016055	05/6/2016	Financial Capability Reminder to submit current closure and corrective action cost estimates by June 15, 2016.
21		ENVIRONMENTAL GEO-TECHNOLOGIES LLC	MIR000016055	07/27/2016	In Compliance Determination Financial Assurance for Closure, Corrective Action, and Liability Coverage.

*	**	Site Legal Name	Site ID	Completed	Review Comments
22	14	EQ RESOURCE RECOVERY INC	MID060975844	11/12/2015	Update Closure Estimate.
23		EQ RESOURCE RECOVERY INC	MID060975844	06/8/2016	Financial capability reminder to submit required amendatory endorsement forms for Liability Insurance Policy.
24	15	FORD MOTOR COMPANY	MID009305665	03/31/2016	Postclosure FT information in compliance.
25	16	FORD MOTOR COMPANY	MID980568711	03/31/2016	Postclosure FT Information in compliance.
26	17	FORD RIVER RAISIN WAREHOUSE	MID005057005	03/31/2016	Closure FT Information in compliance.
27	18	GAGE PRODUCTS CO	MID005338801	11/16/2015	Update Liability Coverage.
28		GAGE PRODUCTS CO	MID005338801	02/18/2016	Update closure cost
29	19	GENERAL MOTORS LLC	MID050615996	01/26/2016	Updated Corrective Action Cost Estimate review.
30	20	GM COMPONENTS HOLDINGS LLC	MID017079625	01/7/2016	Postclosure FA in compliance.
31	21	GRAND BLANC LANDFILL	MID980506265	04/28/2016	In Compliance Determination for financial assurance for postclosure care.
32	22	GRANGER LAND DEVELOPMENT COMPANY	MID082771700	01/14/2016	In Compliance Determination; Financial Assurance for Postclosure Care.
33	23	JOHNSON CONTROLS INC	MID099124299	11/12/2015	Update CA Estimate.
34	24	LACKS INDUSTRIES INC	MID006014666	07/27/2016	Incompliance Determination for financial assurance for postclosure care.
35	25	LACKS INDUSTRIES INC	MID080359433	07/27/2016	In Compliance Determination for financial assurance for Postclosure Care.
36	26	MAHLE ENGINE COMPONENTS USA INC	MID980499735	04/21/2016	In Compliance Determination Financial Assurance for Postclosure Care.
37	27	METAVATION VASSAR LLC	MID005513262	06/2/2016	Review of the Certificate of Deposit statement. Instrument Value more than corrective action cost estimate.
38	28	MICHIGAN DISPOSAL INC	MID000724831	12/28/2015	Update closure cost
39		MICHIGAN DISPOSAL INC	MID000724831	06/8/2016	Financial capability reminder to submit required amendatory endorsement forms for Liability Insurance Policy.
40	29	MICHIGAN SEAMLESS TUBE LLC	MID082767591	04/15/2016	Request for Payment from Trust Agreement
41		MICHIGAN SEAMLESS TUBE LLC	MID082767591	09/14/2016	In Compliance Determination letter for demonstrating financial assurance for corrective action.
42	30	MRP PROPERTIES CO LLC	MID005358130	01/4/2016	In compliance.
43	31	OCCIDENTAL CHEMICAL CORP	MID006014906	09/7/2016	In Compliance Determination Financial Assurance for Postclosure Care.
44	32	OLD CARCO LLC	MID990760100	01/4/2016	Bond Reduced per Agreement with CorePointe. IC.
45		OLD CARCO LLC	MID990760100	03/21/2016	Bond Amount reduced to \$499,528.55.
46	33	PERMA FIX OF MICHIGAN INC	MID096963194	12/17/2015	Update CA Estimate
47		PERMA FIX OF MICHIGAN INC	MID096963194	02/16/2016	Approved revised corrective action cost estimate.
48		PERMA FIX OF MICHIGAN INC	MID096963194	04/25/2016	Consent to Reduce the amount of Surety Bond No.1024783.
49	34	PETRO-CHEM PROCESSING GROUP OF NORTRU LLC	MID980615298	10/2/2015	Complete and return the required sudden and accidental amendatory endorsement form for third party liability coverage

*	**	Site Legal Name	Site ID	Completed	Review Comments
50		PETRO-CHEM PROCESSING GROUP OF NORTRU LLC	MID980615298	05/17/2016	Financial Capability Reminder to submit current cost estimate by July 8, 2016.
51		PETRO-CHEM PROCESSING GROUP OF NORTRU LLC	MID980615298	07/13/2016	Financial Capability Reminder letter to submit current cost estimate for corrective action.
52		PETRO-CHEM PROCESSING GROUP OF NORTRU LLC	MID980615298	08/26/2016	In Compliance Determination letter Financial Assurance for closure and corrective action.
53	35	PHARMACIA & UPJOHN COMPANY LLC	MID000820381	06/3/2016	Consent to terminate Insurance Policy for closure.
54		PHARMACIA & UPJOHN COMPANY LLC	MID000820381	06/3/2016	In Compliance Determination for demonstrating financial assurance for closure and liability coverage.
55	36	POLAR ENVIRONMENTAL SERVICE CORP	MID093826733	12/1/2015	New LOC for EPA enforcement action on Used Oil.
56		POLAR ENVIRONMENTAL SERVICE CORP	MID093826733	09/13/2016	In Compliance Determination based on 9/13/2016 partial closure certification that reduced financial assurance cost estimate and the letter of credit amount was not reduced.
57	37	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID000809905	12/10/2015	2016 Annual EA Budget Request
58	38	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID005356860	12/10/2015	2016 Annual EA Budget Request
59	39	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID005356928	01/15/2016	2016 Annual Budget approved.
60	40	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID980700827	12/10/2015	Plant 2 Budget Amendment Request 2 2015
61		REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID980700827	06/17/2016	Acceptance of the Lansing Plant 2 and Lansing Plant 3, 2016 Budget Amendment Request.
62	41	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MIR000020743	12/10/2015	2016 Annual EA Budget Request.
63	42	SOLUTIA INC	MID009708678	12/17/2015	Release of Trust Funds - replaced.
64	43	STERICYCLE SPECIALTY WASTE SOLUTIONS INC	MID985568021	10/2/2015	submit the current closure cost estimate
65		STERICYCLE SPECIALTY WASTE SOLUTIONS INC	MID985568021	12/1/2015	Update Liability Coverage
66		STERICYCLE SPECIALTY WASTE SOLUTIONS INC	MID985568021	08/3/2016	Financial Capability Reminder to submit current cost estimate for corrective action.
67	44	THE DOW CHEMICAL COMPANY	MID000724724	02/2/2016	
68		THE DOW CHEMICAL COMPANY	MID000724724	03/30/2016	Financial Test information in compliance

*	**	Site Legal Name	Site ID	Completed	Review Comments
69	45	THE DOW CHEMICAL COMPANY	MID980617435	03/30/2016	Financial Test information in compliance.
70	46	TREX PROPERTIES LLC	MID020906764	05/6/2016	Receipt of the updated postclosure and corrective action cost estimate.
71		TREX PROPERTIES LLC	MID020906764	05/12/2016	Review of postclosure and corrective action cost update. Based on review and conversation with company representative, the incorrect inflationary factor was used. The correct cost estimates were recalculated and approved.
72		TREX PROPERTIES LLC	MID020906764	05/17/2016	In Compliance Determination based on review of the letter of credit to demonstrate financial assurance for postclosure and corrective action.
73	47	TREX PROPERTIES LLC	MID091605972	05/17/2016	In compliance determination financial assurance for corrective action.
74	48	US ECOLOGY	MID980991566	11/10/2015	Update Closure Cost Estimate
75		US ECOLOGY	MID980991566	06/8/2016	Financial capability reminder to submit required amendatory endorsement forms for Liability Insurance Policy.
76	49	US ECOLOGY MICHIGAN INC	MID074259565	11/9/2015	Update Closure Cost Estimate
77		US ECOLOGY MICHIGAN INC	MID074259565	06/3/2016	Financial capability reminder to submit required amendatory endorsements for Liability Insurance.
78		US ECOLOGY MICHIGAN INC	MID074259565	09/12/2016	In Compliance Determination Letter for Required Liability Coverage.
79	50	WACKER CHEMICAL CORP	MID075400671	11/30/2015	Submit CA Updated Estimate.
80	51	WARNER LAMBERT COMPANY LLC	MID006013643	06/2/2016	Consent to terminate insurance policy for post-closure and corrective action.
81		WARNER LAMBERT COMPANY LLC	MID006013643	06/2/2016	In Compliance Determination for demonstrating financial assurance for post-closure care and corrective action.
82	52	WASTE MANAGEMENT OF MICHIGAN, INC.	MID000810408	09/6/2016	In Compliance Determination letter Financial Assurance for Postclosure Care.
83	53	WAYNE DISPOSAL INC	MID048090633	06/8/2016	Financial capability reminder to submit required amendatory endorsement forms for Liability Insurance Policy.
84		WAYNE DISPOSAL INC	MID048090633	06/28/2016	In Compliance Determination for demonstrating financial assurance for closure and postclosure care.
85	54	WOLF FIVE LLC	MID004508628	09/6/2016	In Compliance Determination for letter of credit used to demonstrate financial assurance for post-closure care.

* Total number of financial record reviews completed in FY 2016 (85 reviews)

** Facilities with a completed FY 2016 financial record review (54 facilities)

As stated in the Work Plan, the MDEQ runs a proactive financial capability program by sending annual reminders to facilities within 60 days prior to the anniversary date of the financial mechanism asking the facility to provide inflationary adjustments to cost estimates and financial mechanisms for closure, PC, and CA financial assurance (FA) along with liability coverage, as appropriate. In this way, virtually all facilities are in compliance with their financial capability requirements at any given time. Enforcement actions are taken, as required.

RCRAInfo Data Input

On March 31, 2016, the U.S. EPA Office of Inspector General, issued a Management Alert entitled, “Significant Data Quality Deficiencies Impede EPA’s Ability to Ensure Companies Can Pay for Cleanups.” As a result of the alert, the U.S. EPA directed the regions and states through the monthly EPA-States Financial Assurance Calls to update RCRAInfo so that the database reflects current data for the regulated facilities. The MDEQ has undertaken significant effort to improve its financial assurance data reported in RCRAInfo.

As of September 30, 2016, the MDEQ had directly inputted cost estimates and financial assurance mechanisms for all Michigan facilities included in the Permit Workload Universe, with the exception of Michigan State University and the University of Michigan, into RCRAInfo. The exception facilities are exempt from the financial assurance requirements because they state entities. Complete financial assurance information is now reflected in RCRAInfo for the following facilities:

Facility	Site ID
Advanced Resource Recovery LLC	MID 057 002 602
Dow Corning Corporation	MID 000 809 632
DPH Environmental Response Trust	MID 980 568 620
Drug & Laboratory Disposal	MID 092 947 928
Environmental Geo-Technologies	MIR 000 016 055
EQ Resource Recovery Inc	MID 060 975 844
Gage Products Company	MID 005 338 801
Michigan Disposal Inc	MID 000 724 831
Petro-Chem Processing Group of Nortu LLC	MID 980 615 298
Pharmacia & Upjohn Company LLC	MID 000 820 381
Salzburg Landfill, The Dow Chemical Company	MID 980 617 435
The Dow Chemical Company	MID 000 724 724
US Ecology	MID 980 991 566
US Ecology Michigan	MID 074 259 565
Wayne Disposal, Inc	MID 048 090 633
Pharmacia & Upjohn Co LLC	MID 000 082 381

Management and Reporting

U.S. EPA FY2014 – 2018 Strategic Plan, Goal 3: Cleaning Up Communities and Advancing Sustainable Development

Objective 3.2: *Preserve Land.* Conserve resources and prevent land contamination by reducing waste generation and toxicity, promoting proper management of waste and petroleum products, and increasing sustainable materials management.

Database Management and Reporting

WDS/RCRAInfo Reporting: Michigan data for the HWP is entered into WDS and translated to the U.S. EPA national hazardous waste database, RCRAInfo, for Handler, Permitting, Corrective Action (CA), Compliance and Enforcement (CME), and Hazardous Waste (biennial) Reporting data. The implementation of WDS upgrades to translate financial assurance (FA) data to RCRAInfo was delayed to late in calendar year 2013. Direct entry of FA data into RCRAInfo was implemented in order to address data quality deficiencies identified in an audit performed by the U.S. EPA on the RCRAInfo FA module. Although the U.S. EPA has not established a deadline for correcting the FA data deficiency identified through their audit, the MDEQ is proactively correcting FA data. MDEQ progress on the data entry will be communicated to the U.S. EPA, Region 5 on a quarterly basis.

CME Module: The MDEQ commits to maintaining WDS to reflect current CME activities in Michigan. This data continues to be translated into RCRAInfo on a monthly schedule.

Handler Module and Biennial Reporting: The U.S. EPA identification numbers continue to be issued through WDS, and the identification numbers conform to the required check-digit algorithm. This data continues to be translated into RCRAInfo on a monthly schedule.

For this biennial reporting cycle, the MDEQ used the U.S. EPA forms and Florida Biennial Reporting software. The MDEQ stakeholders responded with electronic submissions using the software and paper submissions for the Biennial Report. Issues with the software were encountered that affected facility submittals and MDEQ flat file submittals to RCRAInfo. Although this was the case, the MDEQ successfully submitted the biennial reports to the U.S. EPA via the flat file translation routine in RCRAInfo in a timely manner.

Permit Module: The MDEQ commits to maintaining WDS to reflect current permitting, closure, and Post-closure activities in Michigan, including facilities listed by the U.S. EPA as high priority under the federal GPRA. This data will continue to be translated into RCRAInfo on a monthly schedule through the Exchange Network by submitting XML files.

CA Module: The MDEQ commits to maintaining WDS to reflect CA activities in Michigan, including facilities listed by the U.S. EPA as high priority under the federal GPRA. This data will continue to be translated into RCRAInfo on a monthly schedule through the Exchange Network by submitting XML files.

Laboratory Support

The MDEQ samples collected during sampling and compliance inspections are analyzed in the MDEQ Environmental Laboratory, unless specialized analytical capability not available through the MDEQ Environmental Laboratory is required. All analyses conducted by the MDEQ were performed in accordance with the standard procedures contained in the September 13, 2013, quality assurance manual entitled OWMRP, *Quality Assurance Quality Control Manual for the Sampling and Analysis of Environmental Media, Revision 5*. A scheduled, periodic revision to the manual (Revision 6) was completed on August 31, 2016 and all sampling and analysis conducted by the MDEQ going forward will adhere to the provisions in the revised manual.

Safety Training

Notices for the required hazardous waste operations and emergency response (HAZWOPER) training and annual health monitoring were sent to individual OWMRP staff as reminders that they were due for their required training and physicals. During FY 2016, 40 staff completed their 8-hour HAZWOPER training, 2 staff completed an initial 40-hour HAZWOPER training, 20 staff completed their annual fit testing and training, and 9 staff attended CPR and first aid training and successfully recertified these skills. In addition, 24 HWS, District/Field Office staff, and OWMRP managers completed one or more of 3 online National Incident Management System (NIMS) trainings (ICS 100, ICS 200, and ICS 700) to gain an understanding of the Incident Command structure that would be implemented if a large scale incident requiring MDEQ response occurs. Completion of the NIMS trainings are required for staff that may be called upon to respond to an emergency incident and the training must be refreshed every three years from the initial completion date.

WASTE MINIMIZATION

U.S. EPA FY2014 – 2018 Strategic Plan, Goal 4: Ensuring the Safety of Chemicals and Preventing Pollution

Objective 4.2: *Promote Pollution Prevention.* Conserve and protect natural resources by promoting pollution prevention and the adoption of other sustainability practices by companies, communities, governmental organizations, and individuals.

Office of Environmental Assistance, Support of Pollution Prevention

In protecting Michigan's environment, Pollution Prevention (P2) is a key element. It is an analysis approach that companies and communities can use to reduce the use of natural resources, minimize the generation of toxic and hazardous wastes through process changes, purchases of non/less toxic raw materials, and other methods. The MDEQ, OEA, administers § 11108 of Act 451, which established the state Waste Reduction Fee. Fees are assessed on businesses according to quantities of hazardous waste disposed at TSDFs within Michigan. Fees collected must be used for activities specified in Part 143, Waste Minimization, and Part 145, Waste Reduction Assistance, of Act 451.

Parts 143 and 145 of Act 451 contain the following major components:

- Provision of P2 assistance including information, technical, and financial assistance to help businesses, institutions, and communities;
- Application of P2 in multi-media compliance assistance to encourage businesses, municipalities, and the public to meet environmental responsibilities in a cost-effective manner;
- Identification of opportunities to encourage P2 through traditional regulatory activities including permit programs, environmental impact statements, inspections, and enforcement; and
- Collection, analysis, and dissemination to the public of information received under § 313 of Subtitle B of the Emergency Planning and Community Right-to-Know Act of 1986, Title III of the Superfund Amendments and Reauthorization Act of 1986, Public Law 99-499, Title 42 of the United States Code, § 11023.

Section 3.0, Waste Minimization, of the Work Plan summarizes the MDEQ's FY 2016 commitment to protect the Michigan environment through P2. During FY 2016, the OEA continued to support the HWP through non-grant funded work in the following areas:

- Continued oversight for the household drug awareness/collection community grants.
- Maintained the Green Chemistry Clearinghouse and Green Chemistry Roundtable, as well as worked on the annual green chemistry conference.
- Continued to implement the Michigan Clean Diesel Initiative and award grants through the Michigan Clean Diesel Grant Program.
- Maintained partnerships with business sustainability forums.

In addition, the OEA continues to maintain the following core programs and partnerships to encourage waste minimization:

Clean Corporate Citizen
Clean Marinas
Environmental Leaders

Michigan Business P2 Partnership
Small Business P2 Loan Program

Further information about the OEA and its P2 efforts are available in annual reports that may be viewed at <http://www.michigan.gov/deq/0,1607,7-135-3585-73988--,00.html>.

Sustainable Materials Management

The MDEQ's Sustainable Materials Management Unit (SMMU), housed within the OWMRP, focuses on Sustainable Materials Management (SMM) as it relates to waste issues, particularly waste utilization. This aligns with the efforts of the U.S. EPA and fits with Michigan's 2007 Solid Waste Policy (http://www.michigan.gov/deq/0,4561,7-135-3312_4123-172638--,00.html).

Recycling

On April 14, 2014, Michigan's Governor Rick Snyder presented his statewide "Proposed Plan of Action on Recycling" (http://www.michigan.gov/documents/deq/DEQ-OWMRP-SWS-Proposed_Recycling_Action_Plan_448494_7.pdf). Guided by MDEQ discussions with businesses and the public, the proposed plan identified two key goals to be met: convenient access to residential recycling and market development for recycled products. In addition, the Governor appointed a nine-member Governor's Recycling Council to advise the MDEQ in implementing the Plan to achieve a 30 percent residential recycling rate within two years.

In FY 2016, the SMMU and the OWMRP as a whole focused on increasing residential recycling by:

- Increasing the number of counties with convenient access to residential recycling from 29 to 45 counties. Twenty-six counties currently meet the established access metric:
 - A collection program must be provided to each resident through ordinance, public/private partnerships, private-hauler contracting, or a publicly managed program.
 - Each community with 10,000 or more people must provide each resident access to curbside recycling.
 - In a community without curbside recycling, there must be at least one drop-off location per 10,000 people.

The number of counties with convenient access has not increased over the FY however steady progress is being made by Michigan communities and haulers to increase accessibility to recycling options. At this year's Governor's Recycling Summit, data was shared demonstrating strong growth in recycling program availability. Notable program growth highlights were shared. Nineteen significant increases, including new curbside or drop-off collection programs and conversions from bins to carts since 2014, were reported. The Governor's Recycling Council and the MDEQ are currently evaluating this metric and will be making recommended changes in the coming months. The 2015 recycling measurement study found that two-thirds of Michigan residents have convenient access to recycling opportunities per this metric, however, because the MDEQ is tracking progress on a county-by-county basis, incremental progress is not reflected in the Scorecard. The MDEQ will be modifying this metric to more accurately reflect progress on a more granular level.

- Implementing a web-based measurement and benchmarking system. Measurement legislation was passed March 29, 2016, as PA 55 of 2016. A registration system was in place by July 1 for recycling establishments wanting to register. That system was a temporary system while the MDEQ updated the Re-TRAC system so it met the data collection needs outlined in PA 55. The Re-TRAC system adjustments were completed and the electronic registration and reporting system was functioning by October 1, 2016. This will allow recycling establishments the opportunity to get familiar with the system and submit data by the first quarterly report date of February 15, 2017. The MDEQ will be doing a lot of outreach and education for recycling establishments covered by PA 55. Those efforts started late this summer when the MDEQ provided an introduction of PA 55 and the initial registration system. These efforts will continue into late 2017.

- Establishing a robust statewide education and outreach campaign. A statewide recycling outreach campaign at state parks by the MDNR and the Michigan Recycling Coalition (MRC) was announced at the MRC conference on May 4, 2016. This is just the beginning of state outreach and education efforts to promote increased recycling in Michigan.
- Developing markets. \$2.9 million in Grants to develop markets were issued under the FY 2016 Scrap Tire Market Development Grant Program. These Grants will promote new or increased uses for scrap tires. Twelve projects were funded under the FY 2016 Grants (nine road projects utilizing rubberized asphalt, two R & D Projects related to the use of tire material in road applications, and an equipment project to produce additional fine crumb rubber from scrap tires for use in products). FY 17 grant funding availability was announced on October 31, 2016. \$3.5 million is available to fund cleanup and market development projects. Successful grantees will be announced in the spring of 2017.
- Leading by example. The MDEQ is continuing to work to increase recycling in State owned buildings and rest areas.
- Holding the second Governor's Summit on Recycling. The second Governor's Summit on Recycling was held on May 3, 2016. This event reached over 400 recycling service providers, community leaders, manufacturers, and MDEQ staff.

Investing in Residential Recycling in FY 2016 through continuing the \$1 million in funding, establishing a recycling grant program and directing existing community P2 funds from escheated bottle deposit revenues for recycling related P2 grants. Under the guidance of the Governor's Recycling Council, the MDEQ divided the \$1 million dollar general fund appropriation into two separate parts to meet the goals outlined in the Governor's Plan of Action. \$500K of the appropriation was spent on staffing resources to provide technical assistance to local recycling programs and coordinate outreach and education to residents, businesses, and communities seeking to grow recycling opportunities. In addition, \$500K was allocated for grants to local agencies to help implement the program goals. The P2 grant program for 2016 of \$250K is to assist communities and organizations in developing projects that reduce and divert food waste. The P2 grantees were announced on April 21, 2016. At the Governor's Recycling Summit on May 3, 2016, the MDEQ announced that in partnership with The Recycling Partnership, a national non-profit dedicated to helping communities improve recycling programs, that it would fund 9 communities' proposals to switch from smaller recycling bins to larger carts. The available \$450K of MDEQ grant funding was used to leverage over \$947K in match funding in nine Michigan communities. With the help of local waste-hauling businesses, these grant projects will provide 31,592 Michigan households with curbside recycling carts and increase projected total recycling volumes more than 8.7 million pounds each year. The Recycling Partnership staff have advised MDEQ Recycling Program staff and assisted with grant outreach efforts. As a result of this partnership, grantees will receive technical assistance and educational resources from The Recycling Partnership that will be crucial to the success of the projects.

E-Waste Take-Back Program

In FY 2016, the SMMU continued implementing Michigan's electronic waste take-back law, administered under Part 173, Electronics, of the NREPA, which became effective in 2008, with a focus on three areas: (1) educating consumers and retailers about the program provisions; (2) compliance assistance for registered recyclers and manufacturers; and (3) defining necessary program revisions using internal and external stakeholder workgroups.

Under the program, manufacturers that sell new televisions, computers, and printers in the state must register with the MDEQ and have a take-back program in place for those devices. Covered electronic

device recyclers must register with the MDEQ, use approved data destruction methods, be ISO 14001 certified or equivalent, and comply with additional provisions of the law. Retailers of covered electronic devices (CEDs) commit to not offer for sale unregistered brands of CEDs to consumers and small businesses.

Registered computer and television manufacturers reported recycling 21 million pounds of CEDs through their take-back program obligations during FY 2015. Michigan's 22 registered recyclers reported that 23.9 million pounds of electronic devices from Michigan sources were recycled. Improved data collection allowed for more effective cross checking of reported pounds which was a focus area for the program in 2016. The improved data collection was accomplished through additional follow up and field visits to recyclers and collection points across the state. The MDEQ anticipates another decrease in the volume of electronics recycled through Michigan registered recyclers in 2016. Those reports will be available in December of 2016. Per capita collection of covered electronic devices (TVs, computers, printers) for recycling is currently 2.2 pounds. The MDEQ continues to work on educating consumers and retailers about the program requirements, and on compliance assistance for registered recyclers and manufacturers. SB 922 was introduced on April 28, 2016, providing for proposed electronics program amendments. The proposed bill includes provisions for a stakeholder workgroup to delve further into some issues in the program before proposing solutions. It is hoped that this bill will move in the 2017 legislative session.

The MDEQ continues to focus upon compliance assistance efforts for affected businesses and identification and control of scrappers (unregistered recyclers). Program staff expanded its outreach and education efforts to help e-waste recyclers understand regulatory requirements under Michigan regulations (hazardous waste and e-waste programs) and to increase the number of companies participating in the program.

During FY 2016, Hazardous Waste Program and Solid Waste Program staff worked with U.S. EPA, Region 5 staff to identify and characterize a defunct electronics recycler in Michigan's upper peninsula that had accumulated an estimated 1.8 million pounds of crushed CRT glass; conducted enforcement actions against responsible parties to remediate another 10 tons of buried crushed CRT glass at a former residence of the electronics recycler; worked with responsible parties to remediate a third site impacted by non-hazardous but related electronics materials (plastics from recycled electronics). All three sites were related to the defunct electronics recycler.

Solid waste staff conducted nine recycler inspections during the fiscal year and followed up on 17 complaints about unregistered electronics recyclers. Inspections of registered and unregistered electronic recyclers are an ongoing focus of the program.

Other SMM Work

In FY 2016, the SMMU continued to focus on industrial by-product reuse; continued promotion of additional food waste and organics composting; and participation in the U.S. EPA's SMM efforts. Refer to Appendix 3 for the 2015 Industrial By-Products Reuse numbers and the 2015 Food Waste Diversion Rates that were voluntarily reported. These numbers show that a total of 29,829 wet tons of food waste are being diverted and 796,739 tons of industrial by-products are being reused. This is a 10% decrease in reuse over 2014. 2016 Industrial By-Products Reuse numbers are expected to be available in the second quarter of FY 2017.

MISCELLANEOUS ACTIVITIES

Hazardous Waste Section Technical Reviews and Inspections

Annual Groundwater Report Reviews

In FY 2016, the HWS received annual groundwater monitoring reports from all 30 facilities where submittals were required. The HWS reviewed 17 of the 30 reports; all reports were in compliance with the exception of one, and a violation notice was issued to that facility to correct the issues.

Non-Financial Record Reviews

In FY 2016, the HWS completed 113 non-financial record reviews. The documents reviewed included data packages and letters from the facility responding to the MDEQ required submittals.

Waste Determinations

In FY 2016, the HWS initiated a new process to track waste delisting requests, land disposal treatability variance requests, and waste characterization reviews by entering them, along with associated comments and evaluation dates, into a database. This process will continue into future FYs to better understand the volume of waste determination work that the HWS is completing, the types of reviews that have been completed and their respective subject matter, and the determinations made for each specific review.

Waste Delisting

In FY 2016, no new delisting petitions were received by the HWS.

On February 8, 2016, the HWS visited Owosso Graphic Arts, Inc. to collect a sample of the facility's filter cake material to determine if it was consistent with acceptable levels from the facility's March 24, 2011, waste redesignation approval. The sampling audit showed that the sample was consistent with the concentrations that were approved for the redesignation.

Land Disposal Restriction Treatability Variances

On October 9, 2015, the HWS received a request for a treatability variance from US Ecology for waste generated at the Guardian Industries Corporation, Carleton, Michigan (Guardian). The waste is hazardous due to the high concentrations of leachable selenium. US Ecology proposed to manage the waste at their Michigan Disposal Waste Treatment Plant in Belleville, Michigan.

During FY 2016, the HWS completed their review of the variance request, public noticed the request in the Belleville Independent newspaper on April 7, 2016, and announced that the MDEQ was seeking public comments on the request until May 7, 2016. There were no comments received during the public comment period. The HWS issued the final approval of the variance request on May 23, 2016.

Other than the treatability variance discussed above, the HWS did not receive any additional requests during the FY.

Waste Characterization Reviews and Variance Requests

During the latter part of FY 2015, the HWS filled the Waste Characterization Specialist position that had been vacant for several years. The filling of this vacancy re-established a resource dedicated to waste characterization and waste variance determinations and enhanced the HWS's ability to conduct waste characterization reviews and process variance requests to the maximum amount possible.

In FY 2016, the HWS completed 24 waste characterization reviews for a variety of waste types. Refer to the table below for details.

	Activity	Work Completed	Date
1	Waste Characterization	Reviewed analytical results from samples of carbon filter material per the request of the OWMRP Radiological Protection Section for acceptability into a Type II non-hazardous waste landfill.	06/28/2016
2	Waste Characterization	Reviewed information provided by a DNA sequencing laboratory regarding the disposal of Formamide to the POTW.	06/09/2016
3	Waste Characterization	Evaluated the use of cooking grease from a restaurant for use as a fuel.	07/05/2016

	Activity	Work Completed	Date
4	Waste Characterization	Reviewed disposal versus recycling options of the lead-based water service lines from Flint.	05/12/2016
5	Waste Characterization	Researched the use of spent solvent paint waste in roofing sealer for Pasha Paint.	04/28/2016
6	Waste Characterization	Evaluated the request made by Blarney Castle Oil Co. regarding the use of off-spec petroleum for use as paraffin removal from oil well piping.	05/24/2016
7	Waste Characterization	Reviewed the proper management of Phentermine salts as a Michigan U coded commercial product.	06/13/2016
8	Waste Characterization	Reviewed the management of nicotine and lithium batteries in e-cigarettes for a meeting with a retailers group.	06/07/2016
9	Waste Characterization	Reviewed a request by Oakland Co. Health Department regarding the disposal of Metricide OPA via the POTW.	07/27/2016
10	Waste Characterization	Reviewed the applicability of the precious metals exclusion for Circuit Control Corp for a potassium gold cyanide waste.	08/01/2016
11	Waste Characterization	Reviewed EPA's decision to deny a petition to lower the corrosivity hazard from a pH of 12.5 to 11.5.	06/09/2016
12	Waste Characterization	Provided an opinion to the MDEQ Grand Rapids District Office regarding the disposal of site demolition debris - specifically, whether concrete impacted by perchloroethylene is hazardous.	05/17/2016
13	Waste Characterization	Provided guidance to the MDEQ Kalamazoo District Office regarding the characterization and disposal of sand blast sand at a project site in that district.	05/16/2016
14	Waste Characterization	Articulated an opinion to the MDEQ HWS and OEA staff regarding the consolidation and comingling of pharmaceutical waste.	05/16/2016
15	Waste Characterization	Reviewed a waste characterization strategy for HWS Lansing District staff so that recommendations could be provided to a HW generator.	03/21/2016
16	Waste Characterization	Reviewed a request by Terra Contracting Services for characterization of drilling mud used for oil and gas production.	03/21/2016
17	Waste Characterization	Provided characterization feedback on the management of spent spirits and liquors to Jackson district OWMRP staff.	03/21/2016
18	Waste Characterization	Provided guidance to Clean Harbors regarding the comingling and solidification of hazardous waste while in route from point of generation to disposal facility.	02/05/2016
19	Waste Characterization	Provided guidance to a caller regarding the management and disposal of aerosol cans used at a manufacturer.	08/08/2016
20	Waste Characterization	Researched whether the silver reclamation being performed at a facility would meet the precious metals exemption under Rules 9206 and 9803.	04/18/2016
21	Waste Characterization	Addressed questions raised regarding the characterization of reusable filter cleaning material for dust that contains chromium	08/29/2016
22	Waste Characterization	Reviewed available information and provided an opinion on contaminated soils as they pertain to F-listed waste for a RACER site in Ypsilanti.	08/31/2016
23	Waste Characterization	Provided input on the waste characterization of condensate from a heat exchanger used in a manufacturing process where toluene and other compounds are used.	09/06/2016

	Activity	Work Completed	Date
24	Waste Characterization	Discussed the notification requirements of TSCA wastes (PCB-contaminated soils) from an environmental cleanup site with an environmental consultant from Indianapolis, IN.	09/28/2016

Remediation Advisory Team

In FY 2016, the MDEQ, Remediation Advisory Team (RAT), completed the work discussed below:

- Two members of the RAT gave presentations at the MDEQ, Remediation and Redevelopment Division (RRD) Environmental Remediation and Risk Management Conference (October 2015). Dr. Deborah MacKenzie-Taylor gave presentations on the TSCA, PCB Remediation Coordinated Approval process available to Michigan facilities at the conference sessions held in Traverse City, Novi, and Grand Rapids. Ms. Kimberly Tyson gave a presentation on the RCRA/Part 111 Corrective Action Program highlighting major differences between the Part 201 and Part 111 cleanup program at the Grand Rapids session.
- Assisted in the review of sampling data and assessment of the need for additional sampling locations for facility characterization at DuPont Montague, White Lake, Michigan. (October 28, 2015)
- Assisted in the review of the Corrective Measures Implementation (CMI) Plan for General Electric Company, Former Detroit Apparatus Service Center, in Riverview, Michigan. The RAT concurred with the CMI Report approval after public participation and the U.S. Environmental Protection Agency (U.S. EPA) Region 5, TSCA program determination on the residual onsite PCB concentrations. (November 18, 2015)
- Assisted in the review of a proposal to further evaluate the groundwater surface water interface (GSI) pathway, time schedule for institutional controls implementation, and modifications to the Consent Order for Consumer Energy, BC Cobb Landfill, located in Muskegon, Michigan. (December 8, 2015)
- Assisted in the review of the remedial investigations of the wastewater treatment plant at National Standard Company, City Complex, located in Niles, Michigan. (January 27, 2016)
- Offered the U.S. EPA, Region 5 Corrective Action Program staff use of the RAT and other MDEQ technical peer review workgroups with the intent of sharing expertise and aligning efforts of the MDEQ. (February 3, 2016)
- Assisted in the determination on the achievement of remedy construction complete at Safety Kleen, Inc., Mason, Michigan. (February 24, 2016)
- Assisted in the determination of whether to approve the city of Ann Arbor off-site Remedial Action Plan given existing institutional controls in place for the area, the need for additional investigations, and consideration of other proposed actions by the city of Ann Arbor including the execution of a legally enforceable agreement. (June 1, 2016)
- Assisted in the determination to approve the Corrective Measures Implementation Plan for the former Enthone OMI, Warren, Michigan. (June 29, 2016)
- Reviewed and revised the Termination of Groundwater Purge Systems Operational Memo (i.e. Performance Monitoring of Groundwater Purge Systems, Gen-11). (June 29, 2016).
- Assisted in the review of the proposed Remedial Action Plan/Legally Enforceable Agreement for closure at White Lake Landfill, White Lake, Michigan. (August 31, 2016)
- Assisted staff with addressing the volatilization to ambient air pathway for soils contaminated with chlorinated volatile organic compounds at Trex Properties, LLC. Detroit, Michigan. (September 28, 2016)

- Assisted in the review of the proposed closure of several disposal areas not licensed under the Solid Waste Program. (September 28, 2016)
- Two members of the RAT, Ms. Margie Ring and Ms. Kimberly Tyson, continue to participate in the monthly RRD Institutional Control Technical and Program Support Team meetings to assist with proposals to use land or resource use restrictions to support final remedies.

Senior Environmental Employee (SEE) Program

The duties performed by the SEE employees are critical to accomplishing the work described in the Work Plan. During FY 2016, the SEE employees issued 3146 hazardous waste (HW) Site Identification Numbers, and processed 63,335 paper HW manifests and 103,073 electronically received HW manifests. The total HW manifests processed were 166,408, which includes transferring all of this manifest information into an acceptable electronic format, extensive quality control review, entering manifest information into the WDS database and translation to RCRAInfo. In addition, the SEE employees addressed all manifest Freedom of Information Act (FOIA) requests, they keypunched and processed Biennial Reports, and they assisted with extensive mail outs for public noticing. In addition, one SEE employee continued to conduct certain oversight inspections at two commercial hazardous waste facilities in the Southeast Michigan District. Without the SEE funding, it would be necessary to redirect the HW staff from permitting, inspections, CA, enforcement, reporting, and possibly other Work Plan commitments to perform these key program items.

MDEQ Technical and Program Support Teams

The MDEQ, Remediation and Redevelopment Division (RRD), formed Technical and Program Support (TAPS) Teams to provide support and guidance in certain technical areas of the Part 201 Program. In an effort to keep apprised of Part 201 guidance, and to maintain as much consistency between Parts 111 and 201 as possible, the HWS assigned representatives to participate on the following TAPS Teams: Non-Aqueous Phase Liquids (NAPL), Vapor Intrusion (VI), Institutional Controls (IC), GSI, Soil Background (SB), Incremental Sampling (IS), Groundwater Modeling (GWM), and Toxics Group (Tox). The following summarizes the TAPS team activities during the first half of FY 2016.

- **GSI**: The GSI TAPS Team scheduled monthly meetings in FY 2016 some of which were cancelled due to lack of projects to discuss. When meetings were held, there was a significant amount of staff time required to review materials pertaining to each project that was on the agenda.
- **GWM**: The GWM TAPS team holds meetings on an as-needed basis to review potential updates to the guidance document and to conduct site-specific reviews. The GWM TAPS team did not meet during FY 2016.
- **SB**: During FY 2016, several representatives from the HWS continued to provide technical support regarding the new Part 201 definition of natural background. The 2005 Michigan Background Soil Survey (MBSS) was incorporated in the Part 201 of Act 451 definition of natural background in December 2012, which the HWS did not support. The definition in that statute was revised in December 2014. The new Part 201 soil background definition has not been adopted in Part 111/RCRA at this time. During the FY, the HWS provided support to RRD and the SB TAPS Team through the following activities:
 - Drafted the new 2015 MBSS that included all of the new background soil data extracted from RRD files.
 - Provided draft responses to public comments received on the draft 2015 MBSS.
 - Assisted in developing draft “staff instructions” for RRD to use in implementing the new definition of background.
 - Developed draft revised “Statewide Default Background Levels” for metals that may be incorporated into generic cleanup criteria.

- Participated in SB TAPS team meetings, and responded to inquiries regarding soil background from staff, consultants and the regulated community.
- **IS:** The IS TAPS team held meetings on a monthly basis. Representatives from the HWS attended meetings as work priorities allowed to keep current on IS sampling developments, to review RRD project examples, and to review RRD policy and procedure documents. In addition, the HWS team representatives provided guidance to staff on several Part 111 IS proposals.
- **NAPL:** The NAPL TAPS team held quarterly meetings and Part 201 and Part 111 project-specific meetings. In preparation for meetings, team members were provided agenda materials that oftentimes required significant review. The focus of FY 2016 and FY 2017 is the preparation of DNAPL Technical Resource Document. Team members have been reviewing relevant technical literature and attending trainings to increase expertise in this area. The OWMRP is replacing one of our geologist representatives on the NAPL TAPS team with a toxicologist to assist in assessment of relevant pathways and risk management, especially with respect to vapor intrusion issues.
- **IC:** The IC TAPS team held meetings on a monthly basis and team members performed information reviews to approve or deny the use of proposed ordinances. The team is developing Institutional Control guidance for staff use and continuing interactions with local units of government to enact new ordinances or approve of the use of existing ordinances for site-specific closures. This FY, the team assisted with the approval and enactment of a groundwater use ordinance for the city of Dowagiac. Prairie Ronde Realty, formerly National Copper Products (MID005068507) requested the use of a groundwater use ordinance to address contaminated groundwater that migrated from its facility to areas in the city of Dowagiac. Prairie Ronde Realty is implementing corrective action under U.S. EPA, Region 5 lead.
- **VI:** The VI TAPS team held meetings on a monthly basis. Representatives from the HWS attended meetings to provide input on site-specific project reviews, to keep current on VI sampling developments, and to review RRD policy and procedure documents. In addition, the HWS team representative provided guidance to the HWS on several Part 111 VI reports and/or work plans.
- **Tox:** The Toxics Steering Group (TSG) held meetings on a quarterly basis. Toxicologists from the HWP continued to provide support to RRD for the Part 201 Rules Update effort and attended public rollout meetings and a public hearing. A TSG workgroup was formed to evaluate if the chronic acceptable air concentrations (AACs) developed by the RRD are appropriate for investigating and evaluating indoor air concentrations associated with vapor intrusion and to determine if the AACs are also protective of shorter term risks. The AACs are used to develop the inhalation based cleanup criteria for the inhalation exposure pathways. The AACs were reviewed for a subset of volatile chemicals considered potentially significant to the VI pathway. The VI Interim Action Screening Level workgroup has drafted recommended values for the initial list and the process for evaluating additional volatile hazardous substances. The Children's Environmental Health Subcommittee of the TSG reviewed and recommended a revised approach for addressing developmental toxicants for prenatal exposure consistent with that used by the U.S. EPA Toxic Substances and Control Act Program. A toxicologist from the HWS has participated on a Governor's Childhood Lead Poisoning Elimination Board to make recommendations to reduce and eliminate childhood lead exposures.

MDEQ Quality Management Plan

On January 19, 2016, an update of the Quality Management Plan (QMP) was provided to the U.S. EPA detailing changes in organizational structure and contact information within the MDEQ. Pursuant to discussions with the U.S. EPA about QMP reporting requirements, the HWP understands that they will not be required to submit any Quality Assurance Project Plans (QAPPs) to the U.S. EPA other than those that they already provide as part of any new/renewal operating license submittal. All other QAPPs (WAPs, SAPs, CQAPs, etc.) that have been submitted for various RCRA/Part 111 Program

elements will be available to the U.S. EPA through audits or upon request. During FY 2016, the MDEQ QMP Team began the process to draft a revision to the QMP and a draft QMP was circulated among the team members in the latter part of the FY for editing. The MDEQ anticipates submitting the revised QMP to the U.S. EPA in early to mid-FY 2017.

The MDEQ QMP Team met once in each half of FY 2016 and the OWMRP participated in the meetings. The meetings focused upon ensuring that MDEQ Quality Documents were organized and easily available on the MDEQ's internal website in anticipation of the upcoming revision to the QMP. The OWMRP's Quality Documents were found to be complete, organized, and available. The OWMRP Quality Assurance/Quality Control Manual for the Sampling and Analysis of Environmental Media (the primary component of the OWMRP portion of the QMP) was revised on August 31, 2016, and the revised manual (Revision 6) has been distributed to all OWMRP Field staff.

During FY 2016, The OWMRP adhered to the MDEQ's QMP, portions of which describe the process of hiring staff. Managers and supervisors ensured that staff adhered to training plans for respective positions. Tenured staff underwent their annual performance evaluations and new staff underwent their probationary performance evaluations at the 3-month, 6-month, and 1-year benchmarks to evaluate conformance with established work objectives and competencies. The MDEQ continued to retain a training database to document staff training. The U.S. EPA visited the MDEQ's Lansing office on September 14, 2016, to perform their annual HWP file review to evaluate the quality of the MDEQ's administrative controls work and they plan to discuss their findings with MDEQ staff early in FY 2017.

RCRA Ready for Anticipated Use (RAU) Determinations

Refer to the table below for a summary of the MDEQ determinations completed in FY 2016.

Current Site Name	Site Legal Name	Site ID	Event Code	Area Name	Completion Date
Racer Romulus Industrial Land	Revitalizing Auto Communities Environmental Response Trust	MID000809905	CA800YE	Entire Facility	12/18/2015
Consumers Energy Co – Big Rock Point Plant	Consumers Energy Co	MID041407446	CA800YE	Quality Verification Area	01/07/2016
Dow Chemical Main Plant & Incinerator Complex	The Dow Chemical Company	MID000724724	CA800YE	Midland Area Soils	07/21/2016

Appendix 1A – FY 2016 Accomplishments for CA Oversight Work Schedule Commitments

The Dow Chemical Company CA Oversight Work Schedule Accomplishments are summarized separately in Appendix 1B							
Current Site Name	Site Legal Name	Site ID	Event Code	Event Description	Area Name	Completion Date	Comment
SUPPORT PROVIDED ON U.S. EPA-LEAD PROJECTS							
1. BASF CORP	BASF CORP	MID064197742	CA001	Corrective Action Oversight	Entire Facility, 3 U	11/03/2015	CO2 pilot study review and InSirt presentation
2. DPH ERT FLINT SITE PLANT 400	DPH ENVIRONMENTAL RESPONSE TRUST	MID005356647	CA001	Corrective Action Oversight	Entire Facility	11/06/2015	Current conditions report received
STATE-LEAD PROJECTS							
3. AK STEEL DEARBORN WORKS	AK STEEL CORPORATION	MID087738431	CA001	Corrective Action Oversight	Entire Facility	02/01/2016	Approved 2016 corrective action cost estimate.
4. AK STEEL DEARBORN WORKS	AK STEEL CORPORATION	MID087738431	CA001	Corrective Action Oversight	Entire Facility	07/26/2016	Semi-Annual meeting for the Rouge Manufacturing Complex as required by the CACO. Also had a meeting to discuss remedial alternatives for the GSI compliance for the Schaefer Road Area Facility.
5. AK STEEL DEARBORN WORKS	AK STEEL CORPORATION	MID087738431	CA001	Corrective Action Oversight	Ford Area	10/20/2015	Review and Acceptance of August 14, 2015 Response to June 29, 2015 MDEQ Comment Letter DEP Substation 5W Investigation Results
6. AK STEEL DEARBORN WORKS	AK STEEL CORPORATION	MID087738431	CA001	Corrective Action Oversight	RSC Area	12/17/2015	Presentation of the Waste Oxide Building Indoor Air Evaluation Soil Sampling Proposal to the RRD Vapor Intrusion Technical and Program Support Team.
7. AK STEEL DEARBORN WORKS	AK STEEL CORPORATION	MID087738431	CA001	Corrective Action Oversight	Schaefer Road	02/24/2016	On-site to observe sampling at site. IC.
8. AK STEEL DEARBORN WORKS	AK STEEL CORPORATION	MID087738431	CA001	Corrective Action Oversight	Schaefer Road Area	12/08/2015	Semi-Annual Meeting required by the Corrective Action Consent Order.

Appendix 1A – FY 2016 Accomplishments for CA Oversight Work Schedule Commitments

The Dow Chemical Company CA Oversight Work Schedule Accomplishments are summarized separately in Appendix 1B							
Current Site Name	Site Legal Name	Site ID	Event Code	Event Description	Area Name	Completion Date	Comment
9. AK STEEL DEARBORN WORKS	AK STEEL CORPORATION	MID087738431	CA001	Corrective Action Oversight	Schaefer Road Area	07/26/2016	Semi-Annual meeting for the Rouge Manufacturing Complex as required by the CACO. Also had a meeting to discuss remedial alternatives for the GSI compliance for the Schaefer Road Area Facility.
10. AK STEEL DEARBORN WORKS	AK STEEL CORPORATION	MID087738431	CA160	Investigation Supplemental Information Received	Entire Facility	05/19/2016	2015 Environmental Indicator Monitoring Report
11. AK STEEL DEARBORN WORKS	AK STEEL CORPORATION	MID087738431	CA160	Investigation Supplemental Information Received	Ford Area	02/05/2016	AOC DSP B - North Storage Yard Excavation Results Phase 3 Ford Area Letter Report
12. AK STEEL DEARBORN WORKS	AK STEEL CORPORATION	MID087738431	CA160	Investigation Supplemental Information Received	Schaefer Road	03/14/2016	Work Plan for Groundwater and Surface Water Gauging, Sampling and Analysis Schaefer Road Area Waste Water Treatment Plant Property
13. AK STEEL DEARBORN WORKS	AK STEEL CORPORATION	MID087738431	CA170	Investigation Supplemental Information Deemed Satisfactory	Entire Facility	08/22/2016	Approval of the 2015 Environmental Indicator Monitoring Report.
14. AK STEEL DEARBORN WORKS	AK STEEL CORPORATION	MID087738431	CA170	Investigation Supplemental Information Deemed Satisfactory	Ford Area	04/11/2016	DEQ acceptance of the February 5, 2016 Area of Concern DSP B North Storage Yard Excavation Results Letter Report.
15. AK STEEL DEARBORN WORKS	AK STEEL CORPORATION	MID087738431	CA170	Investigation Supplemental Information Deemed Satisfactory	Rsc Area	10/21/2015	Review and Acceptance of September 16, 2015 Response to July 22, 2015 MDEQ Comment Letter Waste Oxide Building Vapor Intrusion Evaluation Formerly PAOC Stripper Building

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Current Site Name	Site Legal Name	Site ID	Event Code	Event Description	Area Name	Completion Date	Comment
16. AK STEEL DEARBORN WORKS	AK STEEL CORPORATION	MID087738431	CA170	Investigation Supplemental Information Deemed Satisfactory	Schaefer Road	04/05/2016	Acknowledgment of March 14, 2016 Work Plan for Groundwater and Surface Water Gauging Sampling Analysis Schaefer Road Area
17. AK STEEL DEARBORN WORKS	AK STEEL CORPORATION	MID087738431	CA195	Investigation Progress Reports Received	Entire Facility	11/11/2015	July through September 2015 Quarterly Progress Report RCRA Corrective Action RMC
18. AK STEEL DEARBORN WORKS	AK STEEL CORPORATION	MID087738431	CA195	Investigation Progress Reports Received	Entire Facility	01/28/2016	October through December 2015 Quarterly Progress Report
19. AK STEEL DEARBORN WORKS	AK STEEL CORPORATION	MID087738431	CA195	Investigation Progress Reports Received	Entire Facility	05/04/2016	January through March 2016 Quarterly Progress Report
20. AK STEEL DEARBORN WORKS	AK STEEL CORPORATION	MID087738431	CA195	Investigation Progress Reports Received	Entire Facility	08/12/2016	AK Steel Dearborn Works April through June 2016 Quarterly Progress Report.
21. AK STEEL DEARBORN WORKS	AK STEEL CORPORATION	MID087738431	CA195	Investigation Progress Reports Received	Entire Facility	08/12/2016	April through June 2016 Quarterly Progress Report RCRA Corrective Action
22. BOSTIK INC	BOSTIK INC	MID060198249	CA001	Corrective Action Oversight	Entire Facility	09/21/2016	Initiated contact with the HW contact in Wisconsin, left a voice mail message, reviewed file and scanned Corrective Action File.
23. CHRYSLER INTROL DIVISION	OLD CARCO LLC	MID990760100	CA001	Corrective Action Oversight	Entire Facility	03/09/2016	Reviewed ANnual Groundwater Report which includes monitoring of corrective action wells. IC.
24. CYTEC INDUSTRIES INC (PAST TSD)	CYTEC INDUSTRIES INC	MID005360680	CA001	Corrective Action Oversight	Aceto/Methan Spill	10/08/2015	Approval of Request to Modify Former Sulfuric Acid Production Plant/Spill D Area Monitoring
25. CYTEC INDUSTRIES INC (PAST TSD)	CYTEC INDUSTRIES INC	MID005360680	CA001	Corrective Action Oversight	Entire Facility	04/20/2016	Cost Recovery

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Current Site Name	Site Legal Name	Site ID	Event Code	Event Description	Area Name	Completion Date	Comment
26. CYTEC INDUSTRIES INC (PAST TSD)	CYTEC INDUSTRIES INC	MID005360680	CA001	Corrective Action Oversight	Entire Facility	06/15/2016	Approved 2015 Annual Monitoring Report dated March 2016.
27. CYTEC INDUSTRIES INC (PAST TSD)	CYTEC INDUSTRIES INC	MID005360680	CA001	Corrective Action Oversight	Methanol Release Dec	05/17/2016	Approved Methanol Release Remediation Closure Report dated 4/12/16 from Allnex USA.
28. CYTEC INDUSTRIES INC (PAST TSD)	CYTEC INDUSTRIES INC	MID005360680	CA001	Corrective Action Oversight	Sulfuric Acid Plant	10/08/2015	Approval of Request to Modify Former Sulfuric Acid Production Plant/Spill D Area Monitoring
29. CYTEC INDUSTRIES INC (PAST TSD)	CYTEC INDUSTRIES INC	MID005360680	CA001	Corrective Action Oversight	Sulfuric Acid Plant	10/08/2015	Approved request dated 8/11/2015 to modify FSAPP/Spill D area groundwater monitoring plan.
30. DELPHI ENERGY & CHASSIS SAGINAW OPERATIONS	DELPHI AUTOMOTIVE SYSTEMS LLC	MID005356845	CA001	Corrective Action Oversight	Entire Facility	09/30/2016	Reviewed ownership data on County's website, attempted contact with IRG (owner of record), no answer; left message with contact information and sent memo to file.
31. DYNO NOBEL INC - ISHPEMING PLANT	DYNO NOBEL INC	MID041413154	CA001	Corrective Action Oversight	Entire Facility	05/18/2016	Site visit
32. EDWARD C LEVY CO PLT 6	EDWARD C LEVY CO	MID094549425	CA001	Corrective Action Oversight	Entire Facility	05/05/2016	Reviewed, sorted and organized DEQ files and copies for EPA files
33. EDWARDS OIL SERVICE INC	EDWARDS OIL SERVICE INC	MID088754668	CA001	Corrective Action Oversight	Entire Facility	10/12/2015	CMI Plan advance work review.
34. EDWARDS OIL SERVICE INC	EDWARDS OIL SERVICE INC	MID088754668	CA001	Corrective Action Oversight	Entire Facility	11/03/2015	Review of proposed CMI Plan
35. EDWARDS OIL SERVICE INC	EDWARDS OIL SERVICE INC	MID088754668	CA001	Corrective Action Oversight	Groundwater Plume	11/03/2015	Review of proposed CMI Plan

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Current Site Name	Site Legal Name	Site ID	Event Code	Event Description	Area Name	Completion Date	Comment
36. ENTHONE OMI INC	ENTHONE OMI INC	MID056717747	CA001	Corrective Action Oversight	Entire Facility	02/09/2016	Discussed status of corrective action at the former Enthone OMI facility with representative of Platform Specialty Products Corporation. This company acquired Alent, Inc., who actively conducts corrective action activities at the facility.
37. ENTHONE OMI INC	ENTHONE OMI INC	MID056717747	CA001	Corrective Action Oversight	Entire Facility	09/09/2016	Provided comments on draft RAP/CMIP dated May 23, 2016 to Platform Specialty Products Corporation, entity performing corrective actions at the former Enthone facility.
38. FORD MOTOR COMPANY - MILAN PLANT	FORD MOTOR COMPANY	MID091955476	CA001	Corrective Action Oversight	Soil, Groundwater, S	03/30/2016	RFI Progress Meeting
39. FORD MOTOR COMPANY - SALINE PLANT	FORD MOTOR COMPANY	MID009305665	CA001	Corrective Action Oversight	Entire Facility	12/09/2015	Review and approval of January-June Semiannual Progress Report
40. FORD MOTOR COMPANY - SALINE PLANT	FORD MOTOR COMPANY	MID009305665	CA001	Corrective Action Oversight	Entire Facility	09/28/2016	Approved Groundwater Monitoring Program 2015 Annual Report, dated 8-1-16 that was received 9-2-16.
41. FORD MOTOR COMPANY - SALINE PLANT	FORD MOTOR COMPANY	MID009305665	CA001	Corrective Action Oversight	Entire Facility	09/29/2016	Approved Semi-Annual Progress Report July-December 2015, report dated June 1, 2016 was received August 26, 2016.
42. FORD MOTOR COMPANY - SALINE PLANT	FORD MOTOR COMPANY	MID009305665	CA001	Corrective Action Oversight	Ou-8 Sludge Ponds	07/13/2016	DEQ letter approving/concurring with excavation and disposal of OU8 contaminated soil (contained out - most soil is not hazardous, some disposed as hazardous).

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Current Site Name	Site Legal Name	Site ID	Event Code	Event Description	Area Name	Completion Date	Comment
43. FORD RIVER RAISIN WAREHOUSE	FORD RIVER RAISIN WAREHOUSE	MID005057005	CA001	Corrective Action Oversight	Entire Facility	10/01/2015	Conducted Split Sampling as part of RFI investigation. IC.
44. FORD RIVER RAISIN WAREHOUSE	FORD RIVER RAISIN WAREHOUSE	MID005057005	CA001	Corrective Action Oversight	Fireline	04/13/2016	Reviewed Additional Sampling Data on Fireline - to be investigated when building is decommissioned. IC
45. FORD RIVER RAISIN WAREHOUSE	FORD RIVER RAISIN WAREHOUSE	MID005057005	CA001	Corrective Action Oversight	Fireline	05/31/2016	Collected Split samples as part of RFI Investigation
46. FORD RIVER RAISIN WAREHOUSE	FORD RIVER RAISIN WAREHOUSE	MID005057005	CA001	Corrective Action Oversight	Former Waste Lagoons	06/29/2016	Meeting with former contractor, Robert Vajcner, in 1950's to discuss lagoons and operations north of old plant. Mr. Vajcner wrote an article on potential karst conditions at Ford Monroe as an op-ed in the Monroe News. MP3 on S/Base
47. FORD RIVER RAISIN WAREHOUSE	FORD RIVER RAISIN WAREHOUSE	MID005057005	CA001	Corrective Action Oversight	SB01-06 Area Of Conc	11/13/2015	Split sampling on Soils for Delineation at SB-01 through SB-06 Area. IC.
48. FORD RIVER RAISIN WAREHOUSE	FORD RIVER RAISIN WAREHOUSE	MID005057005	CA070 YE	Determination of Need For An Investigation - Investigation Is Necessary	Entire Facility	10/01/2015	Reviewed 9/10/15 additional sampling notification letter, determined additional investigation necessary and requested work plan within 30 days. IC.
49. FORD RIVER RAISIN WAREHOUSE	FORD RIVER RAISIN WAREHOUSE	MID005057005	CA070 YE	Determination of Need For An Investigation - Investigation Is Necessary	Fireline	10/01/2015	Reviewed 9/10/15 additional sampling notification letter, determined additional investigation necessary and requested work plan within 30 days. IC.

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50. FORMER DETROIT COKE CORPORATION SITE	HONEYWELL INTERNATIONAL INC	MID099114704	CA001	Corrective Action Oversight	Entire Facility	05/19/2016	OWMRP Staff met with MDOT and their consultants, and RRD to discuss potential environmental issues associated with the planned construction for the Gordy Howe Bridge entrance on the former Detroit Coke Site
51. FORMER PEREGRINE COLDWATER ROAD SITE	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MIR000020743	CA001	Corrective Action Oversight	Groundwater	10/21/2015	Annual budget meeting
52. FORMER TDY VEHICLE SYSTEMS	TELEDYNE VEHICLE SYSTEMS	MID006407597	CA001	Corrective Action Oversight	Entire Facility	10/05/2015	SOW review: SWMUs and analyte lists
53. FORMER TDY VEHICLE SYSTEMS	TELEDYNE VEHICLE SYSTEMS	MID006407597	CA546	CMI Progress Report Due/Received	Entire Facility	04/28/2016	Q1 Progress Report and GWM Report
54. GAGE PRODUCTS CO	GAGE PRODUCTS CO	MID005338801	CA001	Corrective Action Oversight	Entire Facility	09/28/2016	Review of March 2016 Groundwater Not In An Aquifer determination, not acceptably demonstrated
55. GM LANSING GRAND RIVER	GENERAL MOTORS LLC	MID005356894	CA001	Corrective Action Oversight	Entire Facility	02/11/2016	Staff met internally to review May 2015 RFI Work Plan
56. GM LANSING GRAND RIVER	GENERAL MOTORS LLC	MID005356894	CA001	Corrective Action Oversight	Entire Facility	02/18/2016	Staff met internally to review May 2015 RFI Work Plan
57. GM LANSING GRAND RIVER	GENERAL MOTORS LLC	MID005356894	CA001	Corrective Action Oversight	Entire Facility	03/17/2016	Staff met internally to review May 2015 RFI Work Plan
58. MACDERMID INC	MACDERMID INC	MID005338371	CA001	Corrective Action Oversight	Entire Facility	12/14/2015	File review and contacted EPA Region 5 for status of corrective action activities and regulatory agency lead.
59. MACDERMID INC	MACDERMID INC	MID005338371	CA001	Corrective Action Oversight	Entire Facility	01/12/2016	Letter to MacDermid requesting meeting on status of corrective action.

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Current Site Name	Site Legal Name	Site ID	Event Code	Event Description	Area Name	Completion Date	Comment
60. MACDERMID INC	MACDERMID INC	MID005338371	CA001	Corrective Action Oversight	Entire Facility	07/01/2016	DEQ participated in conference call with MacDermid and its consultants to discuss the June 29, 2016 Response to Comments on the Current Conditions Summary and Remedial Investigation Work Plan.
61. MACDERMID INC	MACDERMID INC	MID005338371	CA110	RFI Work plan Received	Entire Facility	04/22/2016	Receipt of Current Conditions Report and Supplemental RFI Work plan.
62. MACDERMID INC	MACDERMID INC	MID005338371	CA120	Investigation Work plan Modification Requested By Agency	Entire Facility	05/31/2016	Draft comments on the April 22, 2016 Current Conditions Report and Remedial Investigation Work Plan. Comments transmitted via email to MacDermid.
63. MACDERMID INC	MACDERMID INC	MID005338371	CA120	Investigation Work plan Modification Requested By Agency	Entire Facility	07/07/2016	DEQ formal review comments on the April 22, 2016 Current Conditions Summary and Remedial Investigation Work Plan.
64. MACDERMID INC	MACDERMID INC	MID005338371	CA160	Investigation Supplemental Information Received	Entire Facility	06/29/2016	Response To Comments to Remedial Investigation Work Plan received.
65. MICHIGAN SEAMLESS TUBE	MICHIGAN SEAMLESS TUBE LLC	MID082767591	CA001	Corrective Action Oversight	Entire Facility	10/16/2015	Meeting with DEQ, Livingston County DPA, and MST's counsel to discuss natural occurring metals in Livingston County relative to findings by MST and CA obligations
66. MICHIGAN SEAMLESS TUBE	MICHIGAN SEAMLESS TUBE LLC	MID082767591	CA001	Corrective Action Oversight	Entire Facility	08/30/2016	Meeting on CMIWP, emphasis on site wide groundwater monitoring. Notes in file.

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67. MICHIGAN SEAMLESS TUBE	MICHIGAN SEAMLESS TUBE LLC	MID082767591	CA001	Corrective Action Oversight	Entire Facility	09/06/2016	Provided oversight on-site site-wide monitoring well survey. IC.
68. MICHIGAN SEAMLESS TUBE	MICHIGAN SEAMLESS TUBE LLC	MID082767591	CA496	CMI Work plan Due/Received	Entire Facility	02/29/2016	Updated plan and response to comments based on 10/27/15 letter from DEQ received.
69. MICHIGAN SEAMLESS TUBE	MICHIGAN SEAMLESS TUBE LLC	MID082767591	CA497	CMI Modification Requested	Entire Facility	10/27/2015	Review comments sent to MST regarding the 6/8/15 CMS and I Report and Summary. Response to comments and revisions requested within 60 days of receipt of letter.
70. MONTAGUE WORKS	CHEMOURS COMPANY FC LLC	MID000809640	CA001	Corrective Action Oversight	Entire Facility	11/12/2015	Public meeting hosted by the White Lake Environmental Network. Provided update on corrective action status at site. DuPont and Chemours representatives presented also.
71. MRP ALMA FACILITY	MRP PROPERTIES CO LLC	MID005358130	CA001	Corrective Action Oversight	Entire Facility	12/08/2015	Staff conducted semi-annual CA meeting with facility staff and consultants to go over the current status
72. NATIONAL STANDARD COMPANY LLC	NATIONAL STANDARD COMPANY LLC	MIT270010549	CA001	Corrective Action Oversight	UST Tank Farm	07/20/2016	Review of Report for Removal of Three 17,500 gallon #6 Fuel Oil USTs.
73. NATIONAL STANDARD NILES CITY COMPLEX	NATIONAL STANDARD NILES CITY COMPLEX	MID005069257	CA001	Corrective Action Oversight	WMU 2 Wastewater Tre	01/27/2016	Discussed National Standard perimeter sampling approach around the WWTP to demonstrate its operations caused no environmental impacts.

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74. NATIONAL STANDARD NILES CITY COMPLEX	NATIONAL STANDARD NILES CITY COMPLEX	MID005069257	CA001	Corrective Action Oversight	WMU 2 Wastewater Tre	02/08/2016	Conference call with National Standard Consultants regarding Remediation Advisory Team January 27, 2016 review comments.
75. NATIONAL STANDARD NILES CITY COMPLEX	NATIONAL STANDARD NILES CITY COMPLEX	MID005069257	CA001	Corrective Action Oversight	WMU 20 Impacts Groun	01/07/2016	Emailed draft approval letters for DEQ review of the August 19, 2015 Supplemental RFI Work Plan for additional Offsite Groundwater Delineation (WMU 20) to National Standard Consultants. Hardcopies to mailed.
76. NATIONAL STANDARD NILES CITY COMPLEX	NATIONAL STANDARD NILES CITY COMPLEX	MID005069257	CA170	Investigation Supplemental Information Deemed Satisfactory	WMU 11 WWTP Tank Far	01/11/2016	Review of the February 24, 2015 Response to MDEQ February 6, 2015 NOD Work Plan for WWTP Investigation (WMU 2 and WMU 11)
77. NATIONAL STANDARD NILES CITY COMPLEX	NATIONAL STANDARD NILES CITY COMPLEX	MID005069257	CA170	Investigation Supplemental Information Deemed Satisfactory	WMU 2 Wastewater Tre	01/11/2016	Review of the February 24, 2015 Response to MDEQ February 6, 2015 NOD Work Plan for WWTP Investigation (WMU 2 and WMU 11)
78. NATIONAL STANDARD NILES CITY COMPLEX	NATIONAL STANDARD NILES CITY COMPLEX	MID005069257	CA170	Investigation Supplemental Information Deemed Satisfactory	WMU 20 Impacts Groun	01/11/2016	Approval of August 19, 2015 Supplemental RCRA Facility Investigation Work Plan for Additional Offsite Delineation (WMU 20)
79. POWERTRAIN PRODUCT SUPPORT CENTER	GENERAL MOTORS CORPORATION	MID005356795	CA001	Corrective Action Oversight	Entire Facility	08/05/2016	Approval of RFI Work Plan Addendum No. 1 on March 8, 2016 by E-mail from Kevin Lund.

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80. RACER COLDWATER ROAD LANDFILL	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID005356860	CA001	Corrective Action Oversight	Entire Facility	10/21/2015	Annual budget meeting
81. RACER PLANTS 2 & 3	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID980700827	CA001	Corrective Action Oversight	Entire Facility	10/21/2015	DEQ staff met with RACER and their consultants for a quarterly update and budget review
82. RACER PLANTS 2 & 3	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID980700827	CA001	Corrective Action Oversight	Entire Facility	11/19/2015	Approval of geochemical signature monitoring plan between the perched vs weathered bedrock zones
83. RACER PLANTS 2 & 3	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID980700827	CA001	Corrective Action Oversight	Entire Facility	12/03/2015	Site Visit to observe excavation at Area 7. IC.
84. RACER PLANTS 2 & 3	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID980700827	CA001	Corrective Action Oversight	Entire Facility	12/10/2015	Oversight of CA Activities On-Site; Excavation and Drilling/Sampling. IC.
85. RACER PLANTS 2 & 3	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID980700827	CA001	Corrective Action Oversight	Entire Facility	01/26/2016	DEQ staff met with RACER and their consultants for a quarterly update on the status of the ongoing corrective action work at the site.
86. RACER ROMULUS INDUSTRIAL LAND	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID000809905	CA001	Corrective Action Oversight	Entire Facility	10/10/2015	Review of 10/9/15 Well abandonment plan
87. RACER ROMULUS INDUSTRIAL LAND	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID000809905	CA001	Corrective Action Oversight	Entire Facility	12/18/2015	Review of 12/17/15 Final CMI report

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88. RACER ROMULUS INDUSTRIAL LAND	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID000809905	CA500	CMI Work plan Approved	Entire Facility	10/12/2015	CMI WP basically consists of an approved well abandonment plan and approved draft declaration of restrictive covenant language (DRC). A summary of CA activities, the formal lab data, a copy of recorded DRC, and certs will be in CMI report.
89. RACER ROMULUS INDUSTRIAL LAND	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID000809905	CA536	CMI Report Due/Received	Entire Facility	12/16/2015	Final CMI Report Submitted
90. RACER ROMULUS INDUSTRIAL LAND	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID000809905	CA772 EP	Institutional Controls Established - Enforcement And Permit Tools	Entire Facility	10/30/2015	Declaration of Restrictive Covenant recorded with Wayne County ROD. Liber 52557, Pages 1028 (13 pages)
91. RACER ROMULUS INDUSTRIAL LAND	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID000809905	CA900 CR	Ca Performance Standards Attained - Controls Required	Entire Facility	12/22/2015	CMI Report approved. Institutional control (deed restrictions) in place. Letter sent to facility.
92. RACER TRUST LANSING PLANT 6 INDUSTRIAL LAND	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID005356928	CA001	Corrective Action Oversight	Areas 5-7, 7, & 9	12/03/2015	Site Visit to observe excavation at Area 7. IC.
93. RACER TRUST LANSING PLANT 6 INDUSTRIAL LAND	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID005356928	CA001	Corrective Action Oversight	Entire Facility	10/21/2015	DEQ staff met with RACER and their consultants for a quarterly update and budget review
94. RACER TRUST LANSING PLANT 6 INDUSTRIAL LAND	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID005356928	CA001	Corrective Action Oversight	Entire Facility	01/26/2016	DEQ staff met with RACER and their consultants for a quarterly update on the status of the ongoing corrective action work at the site.

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95. REMEDIATION & REDEVELOPMENT DIV FENSKE LANDFILL	MI DEPT/NATURAL RESOURCES AND ENVIRONMENT	MID072589328	CA001	Corrective Action Oversight	Entire Facility	09/14/2016	File review to evaluate facility progress toward achieving a CA 550 Remedy Constructed determination.
96. REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID980587893	CA001	Corrective Action Oversight	Entire Facility	02/15/2016	Review of RACER letters of 2/15/16 concerning PCB abatement activities to Region 5 TSCA program.
97. REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID980587893	CA001	Corrective Action Oversight	Entire Facility	02/23/2016	Receipt and review of 2015 Groundwater Sampling Results for the Southern and Eastern site boundaries from GHD.
98. REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID980587893	CA001	Corrective Action Oversight	Entire Facility	03/02/2016	Receipt and Review of Conceptual Design for Stormwater Management Document.
99. REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID980587893	CA001	Corrective Action Oversight	Entire Facility	03/02/2016	Receipt and Review of LNAPL Site Characterization and Management Plan Update
100. REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID980587893	CA001	Corrective Action Oversight	Entire Facility	06/28/2016	Approval of 6/27/16 Intermediate and Deep Drilling Plan via Kevin Lund's e-mail of 6/28/16.
101. SAFETY KLEEN SYSTEMS INC	SAFETY KLEEN SYSTEMS INC	MID981000359	CA001	Corrective Action Oversight	Entire Facility	12/02/2015	Collected Split Samples of Semi-Annual GW Monitoring Event. Also did site recon. IC.
102. SAFETY KLEEN SYSTEMS INC	SAFETY KLEEN SYSTEMS INC	MID981000359	CA200	Investigation Approved	Entire Facility	01/25/2016	Approval of document summarizing all previous investigations and corrective actions at facility and demonstrating that all WMUs and AOCs have been addressed.

Appendix 1A – FY 2016 Accomplishments for CA Oversight Work Schedule Commitments

The Dow Chemical Company CA Oversight Work Schedule Accomplishments are summarized separately in Appendix 1B							
Current Site Name	Site Legal Name	Site ID	Event Code	Event Description	Area Name	Completion Date	Comment
103. SELFRIDGE AIR NATIONAL GUARD	US DEPT/DEFENSE	MID099113128	CA001	Corrective Action Oversight	Area 2 & 8A	03/30/2016	Approval of Area 2 and 8a excavation tech memo and recommendations
104. SELFRIDGE AIR NATIONAL GUARD	US DEPT/DEFENSE	MID099113128	CA001	Corrective Action Oversight	Building 1533	01/19/2016	Building 1533 Round 8 GW Monitoring Report approval
105. SELFRIDGE AIR NATIONAL GUARD	US DEPT/DEFENSE	MID099113128	CA001	Corrective Action Oversight	Entire Facility	01/19/2016	Annual Institutional Control Compliance Certification approval
106. SELFRIDGE AIR NATIONAL GUARD	US DEPT/DEFENSE	MID099113128	CA001	Corrective Action Oversight	Site 37	04/20/2016	Site 37 LTM Round 4 Monitoring Report approval
107. SELFRIDGE AIR NATIONAL GUARD	US DEPT/DEFENSE	MID099113128	CA001	Corrective Action Oversight	Site 37	05/18/2016	Split Sampling Site 37
108. SELFRIDGE AIR NATIONAL GUARD	US DEPT/DEFENSE	MID099113128	CA001	Corrective Action Oversight	Sites 21,24, and 25	12/08/2015	Approval of After Action Report for Sites 21,24,and 25
109. SILBOND CORPORATION	SILBOND CORPORATION	MID005039458	CA001	Corrective Action Oversight	Entire Facility	06/07/2016	Approved Quarterly Progress Reports # 14 and 15, dated 1/11/16 and 4/7/16 respectively.
110. SILBOND CORPORATION	SILBOND CORPORATION	MID005039458	CA001	Corrective Action Oversight	Entire Facility	06/13/2016	Approved extension of Corrective Measures Implementation Plan (CMIP) until August 29, 2016.
111. SILBOND CORPORATION	SILBOND CORPORATION	MID005039458	CA001	Corrective Action Oversight	Entire Facility	08/11/2016	Approved Quarterly Progress Report #16, dated 8/1/16.
112. SILBOND CORPORATION	SILBOND CORPORATION	MID005039458	CA001	Corrective Action Oversight	Entire Facility	09/12/2016	Sent Oversight Cost Recovery for Corrective Action letter.
113. SILBOND CORPORATION	SILBOND CORPORATION	MID005039458	CA350	CMS Approved	Entire Facility	03/24/2016	DEQ approved with conditions the CMS dated 4-24-2015
114. STEELCASE INC GRAND RAPIDS SITE	STEELCASE INC	MID006016547	CA001	Corrective Action Oversight	Entire Facility	04/19/2016	Phone conversation with RRD Project Manager, File search for R 525 Deed Notice, Enter 525 notice in WDS.

Appendix 1A – FY 2016 Accomplishments for CA Oversight Work Schedule Commitments

The Dow Chemical Company CA Oversight Work Schedule Accomplishments are summarized separately in Appendix 1B							
Current Site Name	Site Legal Name	Site ID	Event Code	Event Description	Area Name	Completion Date	Comment
115. STEELCASE INC GRAND RAPIDS SITE	STEELCASE INC	MID006016547	CA001	Corrective Action Oversight	Entire Facility	04/27/2016	Review technical status of AOCs, site history, AOCs with John Pawloski of RRD. Write up site summary email.
116. TREX PROPERTIES LLC	TREX PROPERTIES LLC	MID020906764	CA001	Corrective Action Oversight	Entire Facility	03/23/2016	Letter to Trex requesting immediate action to mitigate potential indoor air exceedances.
117. TREX PROPERTIES LLC	TREX PROPERTIES LLC	MID020906764	CA001	Corrective Action Oversight	Entire Facility	04/04/2016	Letter requesting presumptive mitigation of indoor air pathway.
118. TREX PROPERTIES LLC	TREX PROPERTIES LLC	MID020906764	CA001	Corrective Action Oversight	Entire Facility	04/08/2016	Receipt and review of VCAA progress report
119. TREX PROPERTIES LLC	TREX PROPERTIES LLC	MID020906764	CA001	Corrective Action Oversight	Entire Facility	05/06/2016	Site visit to observe sub slab soil depressurization system design work
120. TREX PROPERTIES LLC	TREX PROPERTIES LLC	MID091605972	CA001	Corrective Action Oversight	Entire Facility	10/09/2015	Letter of 10/09/15 from John McCabe to David Craig
121. TREX PROPERTIES LLC	TREX PROPERTIES LLC	MID091605972	CA001	Corrective Action Oversight	Entire Facility	11/18/2015	Received, processed and approved request for 10 day extension to CMI Work Plan submittal deadline.
122. TREX PROPERTIES LLC	TREX PROPERTIES LLC	MID091605972	CA001	Corrective Action Oversight	Entire Facility	01/05/2016	Review of 4th Quarter 2015 Corrective Action Progress Report
123. TREX PROPERTIES LLC	TREX PROPERTIES LLC	MID091605972	CA001	Corrective Action Oversight	Entire Facility	04/08/2016	Receipt and Review of CACO Progress Report
124. TREX PROPERTIES LLC	TREX PROPERTIES LLC	MID091605972	CA496	CMI Work plan Due/Received	Entire Facility	05/19/2016	
125. TREX PROPERTIES LLC	TREX PROPERTIES LLC	MID091605972	CA497	CMI Modification Requested	Entire Facility	01/25/2016	NOD issued for CMI Work plan. Response from Trex due 45 days after receipt.
126. WACKER CHEMICAL CORP	WACKER CHEMICAL CORP	MID075400671	CA001	Corrective Action Oversight	Entire Facility	01/14/2016	Q3'15 Monitoring Report Review. MW P-3 Repair Needed.

Appendix 1A – FY 2016 Accomplishments for CA Oversight Work Schedule Commitments

The Dow Chemical Company CA Oversight Work Schedule Accomplishments are summarized separately in Appendix 1B							
Current Site Name	Site Legal Name	Site ID	Event Code	Event Description	Area Name	Completion Date	Comment
127. WACKER CHEMICAL CORP	WACKER CHEMICAL CORP	MID075400671	CA001	Corrective Action Oversight	Entire Facility	01/19/2016	CA Cost Estimate and Q4'15 Report review
128. WACKER CHEMICAL CORP	WACKER CHEMICAL CORP	MID075400671	CA546	CMI Progress Report Due/Received	Entire Facility	10/15/2015	Quarterly Progress Report
129. WARNER LAMBERT CO LLC FORMER MANUFACTURING SITE	WARNER LAMBERT COMPANY LLC	MID006013643	CA001	Corrective Action Oversight	Dunton Park	01/07/2016	DEQ approval - Fourth Qtr Groundwater Monitoring Report and Summary of Initial Assessment dated 1-7-16
130. WARNER LAMBERT CO LLC FORMER MANUFACTURING SITE	WARNER LAMBERT COMPANY LLC	MID006013643	CA001	Corrective Action Oversight	Dunton Park	04/21/2016	2016-04-21 approved Revised Ground Water Monitoring & Assessment Plan for Macatawa Warehouse Dev & Dunton Park dated March 2016
131. WARNER LAMBERT CO LLC FORMER MANUFACTURING SITE	WARNER LAMBERT COMPANY LLC	MID006013643	CA001	Corrective Action Oversight	Dunton Park	06/07/2016	Granted request to abandon monitor wells MW-MWD-2, MW-DP-4, MW-DP-5, MW-47 and TW-N-42.
132. WARNER LAMBERT CO LLC FORMER MANUFACTURING SITE	WARNER LAMBERT COMPANY LLC	MID006013643	CA001	Corrective Action Oversight	Dunton Park	07/14/2016	Approved Groundwater Monitoring Results report dated 6/21/16 for Macatawa Warehouse and Dunton Park.
133. WARNER LAMBERT CO LLC FORMER MANUFACTURING SITE	WARNER LAMBERT COMPANY LLC	MID006013643	CA001	Corrective Action Oversight	Entire Facility	02/29/2016	Approved Corrective Action Progress Report dated 2-16-16
134. WARNER LAMBERT CO LLC FORMER MANUFACTURING SITE	WARNER LAMBERT COMPANY LLC	MID006013643	CA001	Corrective Action Oversight	Macatawa Warehouse D	01/07/2016	DEQ approval - Fourth Qtr Groundwater Monitoring Report and Summary of Initial Assessment dated 1-7-16
135. WARNER LAMBERT CO LLC FORMER MANUFACTURING SITE	WARNER LAMBERT COMPANY LLC	MID006013643	CA001	Corrective Action Oversight	Macatawa Warehouse D	04/21/2016	2016-04-21 approved Revised Ground Water Monitoring & Assessment Plan for Macatawa Warehouse Dev & Dunton Park dated March 2016

Appendix 1A – FY 2016 Accomplishments for CA Oversight Work Schedule Commitments

The Dow Chemical Company CA Oversight Work Schedule Accomplishments are summarized separately in Appendix 1B							
Current Site Name	Site Legal Name	Site ID	Event Code	Event Description	Area Name	Completion Date	Comment
136. WARNER LAMBERT CO LLC FORMER MANUFACTURING SITE	WARNER LAMBERT COMPANY LLC	MID006013643	CA001	Corrective Action Oversight	Macatawa Warehouse D	07/14/2016	Approved Groundwater Monitoring Results report dated 6/21/16 for Macatawa Warehouse and Dunton Park.
137. WARNER LAMBERT CO LLC FORMER MANUFACTURING SITE	WARNER LAMBERT COMPANY LLC	MID006013643	CA001	Corrective Action Oversight	Plant Site	04/19/2016	Approval of 2015 Annual Performance Monitoring Report - Plant Site Hydraulic Containment System dated 2-16-2016
138. WARNER LAMBERT CO LLC FORMER MANUFACTURING SITE	WARNER LAMBERT COMPANY LLC	MID006013643	CA001	Corrective Action Oversight	Plant Site	05/17/2016	Approved Post-Sparge System Groundwater Monitoring Results at PZ-3-O, dated 4/18/16.
139. WARNER LAMBERT CO LLC FORMER MANUFACTURING SITE	WARNER LAMBERT COMPANY LLC	MID006013643	CA001	Corrective Action Oversight	Plant Site	06/16/2016	Approved 2015 Annual Performance Monitoring Report dated 2/22/2016.
140. WARNER LAMBERT CO LLC FORMER MANUFACTURING SITE	WARNER LAMBERT COMPANY LLC	MID006013643	CA001	Corrective Action Oversight	Plant Site	07/01/2016	Approved LNAPL Monitoring and Management Plan Summary 3rd Quarter (Feb-April 2016)
141. WARNER LAMBERT CO LLC FORMER MANUFACTURING SITE	WARNER LAMBERT COMPANY LLC	MID006013643	CA001	Corrective Action Oversight	PZ-3-0	09/07/2016	Split Sampling at PZ-3-0 to confirm GW concentrations. Draft Staff Report with Pics and Video on S Facilities / Monitoring
142. WARNER LAMBERT CO LLC FORMER MANUFACTURING SITE	WARNER LAMBERT COMPANY LLC	MID006013643	CA001	Corrective Action Oversight	R&D South (MSU)	06/07/2016	Granted request to abandon monitor wells MW-MWD-2, MW-DP-4, MW-DP-5, MW-47 and TW-N-42.
143. WAYNE DISPOSAL INC	WAYNE DISPOSAL INC	MID048090633	CA001	Corrective Action Oversight	Entire Facility	03/09/2016	RFI Supplemental Work Plan approval
144. WAYNE DISPOSAL INC	WAYNE DISPOSAL INC	MID048090633	CA001	Corrective Action Oversight	Entire Facility	08/16/2016	Results from Site 1 Leachate Split Sampling Event
145. WAYNE DISPOSAL INC	WAYNE DISPOSAL INC	MID048090633	CA001	Corrective Action Oversight	Entire Facility	08/23/2016	Observed Site 1 Drilling for Corrective Action. IC.

Appendix 1A – FY 2016 Accomplishments for CA Oversight Work Schedule Commitments

The Dow Chemical Company CA Oversight Work Schedule Accomplishments are summarized separately in Appendix 1B							
Current Site Name	Site Legal Name	Site ID	Event Code	Event Description	Area Name	Completion Date	Comment
146. WAYNE DISPOSAL INC	WAYNE DISPOSAL INC	MID048090633	CA150	Investigation Work plan Approved	Entire Facility	03/09/2016	RFI Supplemental Work Plan approval
147. WAYNE DISPOSAL INC	WAYNE DISPOSAL INC	MID048090633	CA170	Investigation Supplemental Information Deemed Satisfactory	Entire Facility	09/20/2016	Approved groundwater Monitoring Parameter list. IC.
148. WOLF FIVE LLC (FORMER WYCKOFF STEEL PROPERTY)	WOLF FIVE LLC	MID004508628	CA001	Corrective Action Oversight	Entire Facility	10/13/2015	Assist EPA, Region 5 with the development of its October 14, 2015 response to Wolf Five LLC August 27, 2015 email concerning its obligations at the former Wyckoff Steel property.
149. WOLF FIVE LLC (FORMER WYCKOFF STEEL PROPERTY)	WOLF FIVE LLC	MID004508628	CA001	Corrective Action Oversight	Entire Facility	07/15/2016	Meeting with potential purchaser PulteGroup, its attorney, Schafer Development, and consultants to discuss plans for pursuing a Corrective Action Complete Determination for portions of Parcel A.
150. WOLF FIVE LLC (FORMER WYCKOFF STEEL PROPERTY)	WOLF FIVE LLC	MID004508628	CA001	Corrective Action Oversight	Entire Facility	07/20/2016	Receipt of 2016 Annual Report dated July 13, 2016 pursuant to CALTA No 111-03-15.

Appendix 1B – FY 2016 Year End Accomplishments for Dow CA Oversight Work
Schedule Commitments

Dow On-Site Corrective Action Work Completed	Date	WDS (Yes if Entered Into WDS)
Call with Dow re On-Site CA – General (Taylor/Crook)	11/16/2015	
Field Work - Dow Plant Site Midland – 1925 Landfill Phyto Cap	11/18/2015	Yes
Web meeting with Dow re On-Site CA (2016 CAIP submittal)	11/20/2015	
Monthly On-Site Corrective Action Face-to-Face meeting with Dow	01/12/2016	
Email to Dow re Ash Pond contaminated media management	01/11/2016	
Dow On-Site CA web meeting re Ash Pond	01/13/2016	
Call with Dow re On-Site CA – General (Taylor/Crook)	02/03/2016	
Monthly On-Site Corrective Action Face-to-Face meeting with Dow (Bay City)	02/09/2016	Yes
WebEx with Dow to Review/Discuss SLF Cap Design and T-Pond Non-Routine Solids Removal Submittals	02/17/2016	
Monthly On-Site Corrective Action Face-to-Face meeting with Dow	03/08/2016	Yes
Web meeting with Dow re Ash Pond and Brind Pond Plan Development	03/23/2016	Yes
Dow On-Site CA Oversight	04/04/2016	
Phragmites Workshop	04/07/2016	
Monthly On-Site Corrective Action Face-to-Face meeting with Dow (WebEx Meeting)	04/12/2016	
Dow On-Site CA Oversight	04/14/2016	
Dow T-Pond Non-Routine Sediment Removal Plan Inspection	04/15/2016	
Dow On-Site CA Well Relocation Review	04/26/2016	
Dow OMI Glacial Till RA	04/27/2016	
Dow On-Site CA VI Meeting	04/28/2016	
Direct Contact to Soils WebEx	05/10/2016	
Dow On-Site CA RGIS OMI	05/17/2016	
Dow On-Site CA Meeting re Vapor Intrusion	05/24/2016	
Dow On-Site CA Meeting/Inspection	06/16/2016	
Monthly On-Site Corrective Action Face-to-Face meeting with Dow (WebEx Meeting)	06/17/2016	
Meeting with Dow to discuss vapor intrusion framework sampling for on-site corrective actions.	07/21/2016	
Sludge Dewatering Facility Activity Plan Conditional Approval	07/08/2016	Yes
Dow Onsite CA Direct Contact Meeting	08/09/2016	
Field Oversight and Split Sampling – Dow Direct Contact (Campus Area)	08/19/2016	Yes
Field Split Sampling – Dow Direct Contact (Laydown Area)	08/25/2016	Yes
Field Observation and Split Sampling – Dow Direct Contact (Greenbelt Area)	08/30/2016	Yes
Dow RGIS Upgrades	09/15/2016	
RGIS Inspection	09/23/2016	

Dow Off-Site Corrective Action Work Completed	Date	WDS (Yes if Entered Into WDS)
Dow AOC Technical Meeting (Grand Rapids)	10/06/2015	Yes
Notification to Dow that MDEQ intends to split sample sediments	10/07/2016	
MDEQ participation in NRDA call with Trustees	10/08/2015	
MDEQ participation in CAG Meeting	10/09/2015	Yes
MDEQ participation in NRDA meeting with Trustees and Dow (Lansing)	10/13/2015	
Correspondence with Michigan State University Superfund Research Group	10/14/2015	
Transmittal of Dow AOC information to ACOE	10/14/2015	

Appendix 1B – FY 2016 Year End Accomplishments for Dow CA Oversight Work
Schedule Commitments

Dow Off-Site Corrective Action Work Completed	Date	WDS (Yes if Entered Into WDS)
MDEQ Comments on EPA Draft letters to Dow: 1) Segment 2 FP WP; 2) Segment 2 PSWP; and 3) Revised GDIWP	10/19/2015	Yes
MDEQ participation in NRDA call with Trustees	10/22/2015	
MDEQ participation in NRDA call with Trustees	10/26/2015	
MDEQ article on Midland for EPA "Our Rivers" newsletter	11/04/2015	
MDEQ participation in CAG meeting	10/09/2015	Yes
Notification to Dow that DEQ intends to observe activated carbon application to floodplain/consultation with DEQ AQD	11/02/2015	
MDEQ article on Midland for EPA "Our Rivers" newsletter	11/04/2015	
Dow AOC Technical Meeting (Midland)	11/10/2015	Yes
MDEQ notification to MDNR re Threatened and Endangered Species survey delay – denied site access	01/10/2015	
Dow AOC Technical Meeting (Midland)	11/10/2015	Yes
MDEQ participation in NRDA call with Trustees	11/19/2015	
MDEQ transmittal of Dow Invoice for State Future Response Costs 4-1-2015 thru 9-30-2015		
MDEQ participation in NRDA call with Trustees	12/10/2015	
MDEQ comments to EPA on Segment 3 Action Draft Action Memorandum	12/15/2016	Yes
MDEQ participation in NRDA call with Trustees	12/17/2015	
MDEQ participation in NRDA call with Trustees	12/21/2015	
Dow AOC – Conference Call with MDAG and EPA	01/06/2016	
MDEQ participation in NRDA web meeting with Trustees	01/07/2016	
MDEQ participation in NRDA call with U.S. FWS (Taylor/Williams)	01/08/2016	
MDEQ participation in NRDA web meeting with Trustees	01/12/2016	Yes
MDEQ participation in NRDA call with Trustees	01/14/2016	
Dow AOC Technical Meeting (Chicago)	01/19/2016	Yes
Dow AOC Technical Meeting (Chicago)	01/20/2016	Yes
MDEQ participation in NRDA call with Trustees	01/28/2016	Yes
Transmittal of DEQ comments to EPA on Draft Floodplain Determination Letters	02/02/2016	Yes
Dow AOC Project Manager Call with EPA (Taylor/Logan)	02/02/2016	
MDEQ participation in NRDA call with Trustees	02/11/2016	
MDEQ participation in NRDA call with Trustees	02/18/2016	
Dow AOC Technical Meeting (Chicago)	02/22/2016	Yes
Dow AOC Technical Meeting (Chicago)	02/23/2016	Yes
MDEQ Splits Composite Sediment Samples Collected by Dow for Segments 2 - 7	02/23/2016	Yes
MDEQ email to Dow re use of Sugar Beet Soil for Floodplain Fill	02/26/2016	Yes
MDEQ and MDAG ARAR Comments to EPA on Segment 4/5 Response Proposal	03/04/2016	Yes
Web meeting with Dow and MDARD re use of beet soil for landscape restoration on Tittabawassee River Floodplain	03/07/2016	
MDEQ transmittal of Comments to Dow on Segment 4/5 Response Proposal	03/11/2016	Yes
MDEQ participation in NRDA meeting with Trustees and Dow (Lansing)	03/16/2016	
Saginaw River Deepening conference call/webinar with ACOE and EPA	03/18/2016	
MDEQ Transmittal of Soil Screening Prequalification Criteria to Dow and EPA	03/24/2016	Yes
MDEQ participation in NRDA call with Trustees	03/24/2016	

Appendix 1B – FY 2016 Year End Accomplishments for Dow CA Oversight Work
Schedule Commitments

Dow Off-Site Corrective Action Work Completed	Date	WDS (Yes if Entered Into WDS)
MDEQ transmittal of Dow Invoice for State Future Response Costs 10-1-2015 thru 12-31-2015	03/25/2016	Yes
MDEQ participation in CAG meeting	03/28/2016	Yes
Dow AOC Technical Meeting (Midland)	03/29/2016	Yes
Dow AOC Oversight	04/01/2016	
Dow AOC Oversight	04/04/2016	
Dow AOC Oversight	04/05/2016	
Dow AOC Oversight	04/07/2016	
Dow AOC MSU Coordination	04/08/2016	
Webinar on TR Floodplain Results	04/12/2016	
Tittabawassee River Flood Response Trend Sampling	04/13/2016	
Dow AOC Oversight	04/18/2016	
Dowell Mt. Pleasant CA Oversight	04/18/2016	
Dow AOC Oversight	04/21/2016	
Dow AOC Oversight	04/22/2016	
Dow AOC Oversight	04/25/2016	
Tittabawassee River SMA and BMA Inspection	05/03/2016	
Dow AOC Oversight	05/04/2016	
Dowell Mt. Pleasant CA Oversight	05/05/2016	
Dow AOC Oversight	05/05/2016	
Dow AOC Oversight	05/06/2016	
Dowell Mt. Pleasant CA Oversight	05/11/2016	
MDEQ Participation in CAG	05/16/2016	
Dow AOC Oversight	05/16/2016	
Dow AOC Oversight	05/18/2016	
Dow AOC Oversight	05/19/2016	
Dow AOC Oversight	05/20/2016	
Dowell Mt. Pleasant Split Sampling	05/20/2016	
Dow AOC Oversight	05/23/2016	
Dowell Mt. Pleasant Sample Delivery to Lab	05/23/2016	
Dow AOC Oversight	05/24/2016	
DEQ Dowell Oversight	05/25/2016	
Dow AOC Oversight	06/02/2016	
Dowell Mt. Pleasant Webex Meeting	06/13/2016	
Dow Ludington CA Oversight	06/13/2016	
Dow AOC Oversight	06/14/2016	
Dow AOC Technical Meeting	06/15/2016	
Dow AOC Technical Meeting	06/16/2016	
Dow AOC Oversight	06/17/2016	
Dowell Mt. Pleasant Oversight	06/21/2016	
Dowell Mt. Pleasant Oversight	06/28/2016	
Dow AOC Oversight	06/30/2016	
Dow Ludington CA Oversight	07/05/2016	
Dow AOC Project Management	07/06/2016	
Dow Ludington CA Oversight	07/08/2016	
Dow AOC Project Management	07/12/2016	
Dowell Mt. Pleasant Oversight	07/13/2016	
Dow AOC Oversight	07/14/2016	
MDEQ Participation in CAG	07/18/2016	
Dow AOC Technical Meeting	07/19/2016	
Dow AOC PM Meeting	07/20/2016	
Dow AOC Oversight	07/27/2016	

Appendix 1B – FY 2016 Year End Accomplishments for Dow CA Oversight Work
Schedule Commitments

Dow Off-Site Corrective Action Work Completed	Date	WDS (Yes if Entered Into WDS)
Dowell Mt. Pleasant CA Oversight	08/10/2016	
Dow AOC Oversight	08/10/2016	
Dow AOC Oversight	08/11/2016	
Dowell Mt. Pleasant Oversight	08/19/2016	
Dow AOC PM	08/19/2016	
Dow AOC Site Visit	09/08/2016	
Dowell Mt. Pleasant Oversight	09/14/2016	
Dow AOC Oversight	09/15/2016	
MDEQ Participation in CAG	09/19/2016	
Dow AOC Technical Meeting	09/20/2016	
Dow AOC Oversight	09/22/2016	

Midland	Date	WDS (Yes if Entered Into WDS)
MDEQ comments to Dow on MAS RAP – Part III	10/21/2015	Yes
Net meeting with Dow re Midland Soils	10/23/2015	
MDEQ comments to Dow on MAS RAP – Part III Attachment B	12/17/2015	Yes
MDEQ response to property owner requesting sampling of property outside of the Resolution Area	01/06/2016	Yes
MDEQ follow-up response to property owner requesting sampling of property outside of the Resolution Area	01/12/2016	
Dow MAS CA Oversight	05/06/2016	
Dow MAS CA Oversight	05/10/2016	
Dow MAS CA Oversight	05/12/2016	
Dow MAS CA Oversight	05/13/2016	
Dow MAS CA Oversight	05/31/2016	
Dow MAS CA Oversight	06/01/2016	
WebEx Meeting to prep for June 6 th Midland Area Soils Public Meeting	06/02/2016	
Dow Midland Area Soils RAP CMI Public Open House	06/06/2016	
Dow MAS 1200 Airfield Sampling	06/10/2016	
Dow MAS CA Oversight	06/23/2016	
CA Report MAS – Part III RAP/CMI – Work Plan Approved	07/21/2016	Yes

Chicken Egg Exposure Pathway Development

The chicken egg exposure pathway is part of the off-site Dow Chemical Company corrective action conceptual site model pathway evaluation for dioxins and furans contaminants. Michigan is working on outreach to property owners regarding the potential health hazards of consuming eggs produced from raising free-range chickens associated with Midland Area Soils and the floodplains of the Tittabawassee and Saginaw Rivers. Because the chicken egg soil exposure pathway falls under both the Part 111/RCRA facility operating license for corrective action and the CERCLA administrative settlement for the Tittabawassee and Saginaw Rivers and Saginaw Bay, Michigan is reporting this pathway development work separately from other off-site corrective action work.

Appendix 1B – FY 2016 Year End Accomplishments for Dow CA Oversight Work
Schedule Commitments

Chicken Egg Soil Dioxin Exposure Pathway Development	Date	WDS (Yes if Entered Into WDS)
DEQ Meeting with MDHHS, MDARD and MSU to discuss the draft Technical Document, Brochures, and Survey Mailing	06/24/2016	
Hazardous Waste Section Management briefing on draft Technical Document	06/27/2016	
DEQ meeting with MDARD regarding GAAMPs application under Ordinance for Midland Area Soils	07/15/2016	
Dow MAS Citizen Meeting re the use of GAAMPs for raising chicken eggs on property within City of Midland	07/17/2016	
DEQ Discussion with Dow, MSU, EPA in the afternoon between CAG and Citizen Meetings.	07/18/2016	
Community Advisory Group Chicken Egg Briefing	07/18/2016	
DEQ, MDARD Meeting with Midland Citizen who wants to raise chickens on his property	07/18/2016	
DEQ meeting with MDARD and MDHHS on Technical Document and Brochures	07/25/2016	
DEQ Meeting with MDHHS, MDARD and MSU Communications to discuss the draft Technical Document, Brochures, and Survey Mailing	07/29/2016	
Follow up DEQ Meeting on Chicken Egg Documents with MDHHS and MDARD	08/17/2016	
DEQ USPS Research for Chicken Egg brochure mailing in the Midland Area	09/07/2016	
DEQ Research for Chicken Egg brochure mailing in the Midland Area	09/14/2016	
DEQ meeting on draft Technical Document PowerPoint	09/30/2016	

Appendix 2 - FY2016 Non-Commitment Corrective Action Oversight Work Accomplishments

Current Site Name	Site Legal Name	Site ID	CA Event	CA Event Description	Area Name	Lead Agency	Date	Note
Support on U.S. EPA-Lead Projects								
1. FORMER NATIONAL COPPER PRODUCTS INC	PRAIRIE RONDE REALTY COMPANY	MID005068507	CA001	Corrective Action Oversight	Entire Facility	EPA	12/08/2015	Receipt of revised proposed Groundwater Use Ordinance for the city of Dowagiac.
2. FORMER NATIONAL COPPER PRODUCTS INC	PRAIRIE RONDE REALTY COMPANY	MID005068507	CA001	Corrective Action Oversight	Entire Facility	EPA	12/11/2015	Review of revised Groundwater Use Ordinance for the city of Dowagiac.
3. FORMER NATIONAL COPPER PRODUCTS INC	PRAIRIE RONDE REALTY COMPANY	MID005068507	CA001	Corrective Action Oversight	Entire Facility	EPA	01/15/2016	Approved proposed Groundwater Use Ordinance for the city of Dowagiac, Michigan
4. FORMER NATIONAL COPPER PRODUCTS INC	PRAIRIE RONDE REALTY COMPANY	MID005068507	CA001	Corrective Action Oversight	Entire Facility	EPA	02/18/2016	Receipt of City of Dowagiac Groundwater Use Ordinance
5. 100 E PATTERSON LLC	100 E PATTERSON LLC	MID005049440	CA001	Corrective Action Oversight	Entire Facility	EPA	12/7/2015	Constructed groundwater contour map to provide to EPA via e-mail
6. 100 E PATTERSON LLC	100 E PATTERSON LLC	MID005049440	CA001	Corrective Action Oversight	Entire Facility	EPA	12/9/2015	Provided EPA with orthorectified overlay of PA/VSI SWMU map on Facility's base map
7. 100 E PATTERSON LLC	100 E PATTERSON LLC	MID005049440	CA001	Corrective Action Oversight	Entire Facility	EPA	12/11/2015	Constructed map of impacted areas, overlaying sewer lines, tanks, outfalls (very generalized) from the Part A, storm sewers, using Google
8. 100 E PATTERSON LLC	100 E PATTERSON LLC	MID005049440	CA001	Corrective Action Oversight	Entire Facility	EPA	12/15/2015	Conducted meeting with TRC (consultants), Joe Kelly (EPA) and Water Resources Division staff to discuss venting groundwater and how to deal with it under Michigan's Statutes and Rules
9. 100 E PATTERSON LLC	100 E PATTERSON LLC	MID005049440	CA001	Corrective Action Oversight	Entire Facility	EPA	12/15/2015	Constructed map showing HWMU and SWMUs from PA/VSI and e-mailed to EPA. Also sent Google Earth files for EPA to work with.
10. 100 E PATTERSON LLC	100 E PATTERSON LLC	MID005049440	CA001	Corrective Action Oversight	Entire Facility	EPA	2/26/2016	Meeting with TRC, DEQ, and EPA (Dan Mazur and Joe Kelly) to discuss GSI investigation work.
11. 100 E PATTERSON LLC	100 E PATTERSON LLC	MID005049440	CA001	Corrective Action Oversight	Entire Facility	EPA	6/9/2016	DEQ sent review comments on the draft restrictive covenant to representatives of Tecumseh Products, EPA, and potential purchaser.
12. 100 E PATTERSON LLC	100 E PATTERSON LLC	MID005049440	CA001	Corrective Action Oversight	Entire Facility	EPA	7/1/2016	Conference call between DEQ, EPA, and RRD Brownfield Redevelopment staff to discuss groundwater ordinance and restrictive covenant for preventing exposures at affected offsite properties.
13. 100 E PATTERSON LLC	100 E PATTERSON LLC	MID005049440	CA001	Corrective Action Oversight	Entire Facility	EPA	7/7/2016	OWMRP & RRD Staff met with State Representative and Senator to brief them on the status of the Tecumseh Products Site and potential redevelopment plans.

Appendix 2 - FY2016 Non-Commitment Corrective Action Oversight Work Accomplishments

Current Site Name	Site Legal Name	Site ID	CA Event	CA Event Description	Area Name	Lead Agency	Date	Note
14. 100 E PATTERSON LLC	100 E PATTERSON LLC	MID005049440	CA001	Corrective Action Oversight	Entire Facility	EPA	8/4/1016	Meeting to discuss first round of GSI pathway sample results.
15. 100 E PATTERSON LLC	100 E PATTERSON LLC	MID005049440	CA001	Corrective Action Oversight	Entire Facility	EPA	9/8/2016	Meeting to discuss GSI sampling results from 2 sampling events and how they fit in the WRD's regulatory framework for venting groundwater.
16. 100 E PATTERSON LLC	100 E PATTERSON LLC	MID005049440	CA001	Corrective Action Oversight	Entire Facility	EPA	9/15/2016	OWMRP Staff participated in conference call with EPA and facility to discuss project status, GSI and VI issues
17. 100 E PATTERSON LLC	100 E PATTERSON LLC	MID005049440	CA001	Corrective Action Oversight	Entire Facility	EPA	9/19/2016	Modified an e-mail - EPA's synopsis of how GSI works under Michigan's regulations for EPA's communication with the facility.
State-Lead Projects								
18. ALBEMARLE CORPORATION	ALBEMARLE CORPORATION	MID080361454	CA001	Corrective Action Oversight	Entire Facility	S	10/05/2015	Soil Verification Sampling Results, Soil Vapor Extraction Treatment Area
19. BAYER CROPSCIENCE LP	BAYER CROPSCIENCE LP	MID080358351	CA001	Corrective Action Oversight	Groundwater Plume	S	09/16/2016	Approved abandonment of MW-7S and MW-7D. IC.
20. BAYER CROPSCIENCE LP	BAYER CROPSCIENCE LP	MID080358351	CA497	CMI Modification Requested	Entire Facility	S	04/26/2016	Comments to Response from October 27, 2015 response.
21. EI DUPONT DE NEMOURS	EI DUPONT FLINT SITE	MID005512066	CA001	Corrective Action Oversight	Entire Facility	S	08/12/2016	Approved 2015 Remediation Action Monitoring Report & revised Sampling and Analysis Plan dated February 2016.
22. EI DUPONT DE NEMOURS	EI DUPONT FLINT SITE	MID005512066	CA001	Corrective Action Oversight	Entire Facility	S	09/30/2016	Transfer of Ownership C3 Venture
23. GENERAL MOTORS LLC	GENERAL MOTORS LLC	MID050615996	CA001	Corrective Action Oversight	Building 301	S	09/12/2016	Conference call with OWMRP, GM, and its consultants to discuss OWMRP comments on investigation results from renovation activities associated with Building 301, Event Island, and Design Center.
24. GENERAL MOTORS LLC	GENERAL MOTORS LLC	MID050615996	CA001	Corrective Action Oversight	Design Center and En	S	09/12/2016	Conference call with OWMRP, GM, and its consultants to discuss OWMRP comments on investigation results from renovation activities associated with Building 301, Event Island, and Design Center.
25. GENERAL MOTORS LLC	GENERAL MOTORS LLC	MID050615996	CA155	Investigation Supplemental Information Requested By Agency	Building 301	S	01/15/2016	Review of Building 301 Soil Impact Report. Additional evaluation required in press mill area for vapor intrusion pathway.
26. GENERAL MOTORS LLC	GENERAL MOTORS LLC	MID050615996	CA155	Investigation Supplemental Information Requested By Agency	Building 301	S	04/06/2016	Response to February 29, 2016 Building 301 Soil Impact Report Response to MDEQ Comments dated January 15, 2016.

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Current Site Name	Site Legal Name	Site ID	CA Event	CA Event Description	Area Name	Lead Agency	Date	Note
27. GENERAL MOTORS LLC	GENERAL MOTORS LLC	MID050615996	CA155	Investigation Supplemental Information Requested By Agency	Building 301	S	09/12/2016	Response to Comment 1 and Comment 2 in May 13, 2016 Building 301 Soil Impact Report Response to MDEQ Comments did not address DEQ Comments
28. GENERAL MOTORS LLC	GENERAL MOTORS LLC	MID050615996	CA546	CMI Progress Report Due/Received	Entire Facility	S	10/12/2015	RCRA Corrective Action 3rd Quarter Progress Report (July, August, September 2015)
29. GENERAL MOTORS LLC	GENERAL MOTORS LLC	MID050615996	CA546	CMI Progress Report Due/Received	Entire Facility	S	01/11/2016	RCRA Corrective Action Quarterly/Annual Progress Report 4th Quarter (October, November, December 2015)
30. MI DEPT/NAT RES STORAGE FACILTY ROSCOMMON	MI DEPT/NATURAL RESOURCES	MID980825632	CA001	Corrective Action Oversight	Entire Facility	S	07/20/2016	Approved Annual Groundwater Assessment Report for 2015
31. MIDLINK BUSINESS PARK	5200 EAST CORK ST INVESTORS LLC	MID001876663	CA001	Corrective Action Oversight	Area I	S	06/07/2016	Received corrective action complete request for Areas I,II and III
32. MIDLINK BUSINESS PARK	5200 EAST CORK ST INVESTORS LLC	MID001876663	CA001	Corrective Action Oversight	Area II	S	06/07/2016	Received corrective action complete request for Areas I,II and III
33. MIDLINK BUSINESS PARK	5200 EAST CORK ST INVESTORS LLC	MID001876663	CA001	Corrective Action Oversight	Area III	S	06/07/2016	Received corrective action complete request for Areas I,II and III
34. PERMA FIX OF MICHIGAN INC	PERMA FIX OF MICHIGAN INC	MID096963194	CA001	Corrective Action Oversight	Entire Facility	S	02/04/2016	Receipt of PM Environmental Inc Project Number 01-6267-0-002 Sampling and Analysis Plan
35. PERMA FIX OF MICHIGAN INC	PERMA FIX OF MICHIGAN INC	MID096963194	CA001	Corrective Action Oversight	Entire Facility	S	02/16/2016	Approved the January 19, 2016 corrective action cost estimate.
36. PERMA FIX OF MICHIGAN INC	PERMA FIX OF MICHIGAN INC	MID096963194	CA001	Corrective Action Oversight	Entire Facility	S	02/22/2016	Approved Crock wells and monitor wells closure report, groundwater monitoring terminated 8/12/15.
37. PERMA FIX OF MICHIGAN INC	PERMA FIX OF MICHIGAN INC	MID096963194	CA001	Corrective Action Oversight	Entire Facility	S	02/22/2016	Approved the January 30, 2016 Closure Reports - Crocks and Wells for final closure of the crocks and monitoring wells.
38. PERMA FIX OF MICHIGAN INC	PERMA FIX OF MICHIGAN INC	MID096963194	CA001	Corrective Action Oversight	Entire Facility	S	02/23/2016	Receipt of Perma Fix Site Inspection Report for soil barriers.
39. PERMA FIX OF MICHIGAN INC	PERMA FIX OF MICHIGAN INC	MID096963194	CA001	Corrective Action Oversight	Entire Facility	S	03/18/2016	Request Perma-Fix submit formal request to modify approved Operation & Maintenance Plan to go to annual inspection and maintenance activities.
40. PSC ENVIRONMENTAL SERVICES	PETRO-CHEM PROCESSING GROUP OF NORTRU LLC	MID980615298	CA001	Corrective Action Oversight	Entire Facility	S	01/25/2016	Review and approval of 1/23/15 proposal to install additional GW wells to delineate contamination.
41. PSC ENVIRONMENTAL SERVICES	PETRO-CHEM PROCESSING GROUP OF NORTRU LLC	MID980615298	CA001	Corrective Action Oversight	Entire Facility	S	02/19/2016	Letter approving Corrective Measures Study Financial Assurance.
42. PSC ENVIRONMENTAL SERVICES	PETRO-CHEM PROCESSING GROUP OF NORTRU LLC	MID980615298	CA155	Investigation Supplemental Information Requested By Agency	Entire Facility	S	10/27/2015	Review of CA Investigation Report dated 2/12/15, requested replacement pages and two additional soil borings.

Appendix 2 - FY2016 Non-Commitment Corrective Action Oversight Work Accomplishments

Current Site Name	Site Legal Name	Site ID	CA Event	CA Event Description	Area Name	Lead Agency	Date	Note
43. PSC ENVIRONMENTAL SERVICES	PETRO-CHEM PROCESSING GROUP OF NORTRU LLC	MID980615298	CA200	Investigation Approved	Entire Facility	S	09/12/2016	Approved CMS Investigation Report and called in CMS within 60 days of receipt of letter.
44. REICHHOLD INC FERNDAL MICHIGAN	REICHHOLD INC	MID020087128	CA001	Corrective Action Oversight	East Area	S	10/02/2015	Review-Groundwater Sampling for Self-Storage Property-3101 Bermuda St-East Area dated 8-31-15
45. REICHHOLD INC FERNDAL MICHIGAN	REICHHOLD INC	MID020087128	CA001	Corrective Action Oversight	East Area	S	10/21/2015	Referral to Enforcement Section, OWMRP, to update the CALTA for a purchaser of West Area and V-Bldg on East Area
46. REICHHOLD INC FERNDAL MICHIGAN	REICHHOLD INC	MID020087128	CA001	Corrective Action Oversight	East Area	S	10/25/2015	Response to letter from Mr. Siegal dated 10/19/15 possible purchase East Area
47. REICHHOLD INC FERNDAL MICHIGAN	REICHHOLD INC	MID020087128	CA001	Corrective Action Oversight	V-Shaped Bldg	S	02/16/2016	Provided comments on CMI dated 1/19/16 for the V-Shaped Building area
48. REICHHOLD INC FERNDAL MICHIGAN	REICHHOLD INC	MID020087128	CA001	Corrective Action Oversight	West Area	S	10/21/2015	Referral to Enforcement Section, OWMRP, to update the CALTA for a purchaser of West Area and V-Bldg on East Area
49. REICHHOLD INC FERNDAL MICHIGAN	REICHHOLD INC	MID020087128	CA001	Corrective Action Oversight	West Area	S	08/01/2016	Approved timing change for West Area hydraulic monitoring in the CALTA
50. REICHHOLD INC FERNDAL MICHIGAN	REICHHOLD INC	MID020087128	CA497	CMI Modification Requested	West Area	S	02/09/2016	DEQ comments on CMI Plan dated 12-1-15 for West Area of former Reichhold manufacturing facility
51. REICHHOLD INC FERNDAL MICHIGAN	REICHHOLD INC	MID020087128	CA500	CMI Workplan Approved	V-Shaped Bldg	S	03/25/2016	Former Reichhold property, for V-Shaped Building Area only, the southern part of the East Area.
52. REICHHOLD INC FERNDAL MICHIGAN	REICHHOLD INC	MID020087128	CA500	CMI Workplan Approved	West Area	S	03/15/2016	For only the West Area of the former Reichhold Chemical, now owned by WHP Investments
53. RIVERVIEW APPARATUS SERVICE SHOP	GENERAL ELECTRIC CO	MID050616622	CA001	Corrective Action Oversight	Entire Facility	S	02/16/2016	Transmittal of EPA determination on the status of the PCB impacted soils in the exterior yard.
54. RUGGED LINER INC	RUGGED LINER INC	MID058816927	CA001	Corrective Action Oversight	Entire Facility	S	10/21/2015	Letter of 10/21/15 requesting filing of restrictive deed covenant to complete corrective action,
55. WHIRLPOOL CORP ST JOSEPH DIV PLTS 3-6	WHIRLPOOL CORP	MID005477773	CA001	Corrective Action Oversight	Entire Facility	S	11/04/2015	Resolution of GSIPC issues per Kimberly Tyson's letter of 11/04/15
56. WHIRLPOOL CORP ST JOSEPH DIV PLTS 3-6	WHIRLPOOL CORP	MID005477773	CA001	Corrective Action Oversight	Entire Facility	S	02/18/2016	3/7/16 letter to Harbor Shores Community Development clarifying property transfer notice requirements.
57. BATTLE CREEK YARD	GRAND TRUNK WESTERN RAILROAD CO	MID079300075	CA001	Corrective Action Oversight	Entire Facility	S	06/06/2016	OWMRP participated in conference call with Canadian National Railroad (CN), its consultants, and RRD staff to discuss corrective measures activities at the site. CN continuing to address solvent and NAPL plumes and institutional controls.

Appendix 2 - FY2016 Non-Commitment Corrective Action Oversight Work Accomplishments

Current Site Name	Site Legal Name	Site ID	CA Event	CA Event Description	Area Name	Lead Agency	Date	Note
58. FORMER GM PLANT SAGINAW MALLEABLE IRON	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID005356696	CA001	Corrective Action Oversight	Entire Facility	S	02/12/2016	Review and approval of previous investigation activities conducted under RRD lead.
59. FORMER GM PLANT SAGINAW MALLEABLE IRON	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID005356696	CA001	Corrective Action Oversight	Entire Facility	S	08/5/2016	Mixing zone review e-mail from Amanda Armbruster, dated 8/5/16.
60. FORMER GM PLANT SAGINAW MALLEABLE IRON	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID005356696	CA200	Investigation Approved	Entire Facility	S	02/12/2016	Memo to file approving RACER/Arcadis letter of 1/27/16 summarizing previous investigations at the Facility.
61. FORMER GM PLANT SAGINAW MALLEABLE IRON	REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST	MID005356696	CA500	CMI Workplan Approved	Entire Facility	S	07/15/2016	Letter from EPA Region 5 approving TSCA work plan which, combined with approved RAP, entail the CMI work plan

Appendix 3

2015 Michigan Industrial By-Products Reuse (Tons)

(12/29/2015)

Material	Recycled	Disposed	Percent Recycled	Percent Volume Change from 2014	2009 Volumes	Percent Volume Change from 2009
Pulp/paper/wood sludge	96,232	77,453	55%	-6%	39,889	+141%
Shingles	38,672	?	?	+45%	19,650	+97%
Scrap Wood ⁴	115,245	?	?	+4%	26,432	+336%
Cement Kiln Dust (CKD)	11,707	451,448	3%	-73%	29,081	-40%
Foundry Sand	84,406	245,018	31%	-22%	66,870	+26%
Food Processing ³	11,837	?	?	-62%	16,073	-26%
Coal Ash ²	400,000	1,132,112	28%	-11%	174,900	+129%
Drywall	1,895	?	?	-50%	1,048	+81%
Flue Gas Desulfurization Sludge (FGD)	28,573	?	?	-20%	32,328	-12%
Wood Ash ¹	8,172	124,821	6%	+42%	5,592	+46%
TOTALS	796,739	?	?	-10%	411,863	+93%

Foundry sand – 1 cubic yard / ton

Wood – 6 cubic yards/ton

Shingles – 1.4 cubic yards/ ton

FGD

Pulp and paper sludge – 3 wet tons/dry ton

Footnotes

1 – Wood ash from clean wood is exempted by statute with no reporting requirements

2 – Coal ash is exempted by statute. Obtained recycling numbers by contacting Headwaters Resources

3 – Certain sugar beet soils exempted from solid waste. Previous years volumes range from 12,000 to 15,000 tons.

4 – With low natural gas prices less scrap wood is being burned at power plants

? – means we have no way to track quantity of material disposed

Appendix 3

2015 FOOD WASTE DIVERSION RATES - COMPOSTING

(5/5/2016)

Company	Amount (wet tons)
Spurt Industries	11,134
Morgan Composting	500
Johnston Farms	1,743
Tuthill Farms	896
Delta County LF	381
Hammond Farms	1,120
City of East Jordan	15
Emmet County	125
Marquette County LF	74
TOTAL	15,988 wet tons

2015 FOOD WASTE DIVERSION RATES – ANAEROBIC DIGESTION

(5/5/2016)

Location	Amount (wet tons)
Lowell Energy	1,236
Michigan State University	12,605
Fremont Community Digester	
Swedish Biogas	
Green Meadows Dairy	
Scenic View Dairy (Fennville)	
Scenic View Dairy (Freeport)	
TOTAL	13,841 wet tons

2015 FOOD WASTE DIVERSION RATES – FEED ANIMALS

(5/5/2016)

Location	Amount (wet tons)
Johnston Farms	
Courter Farms	
TOTAL	wet tons

GRAND TOTAL	29,829 wet tons
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